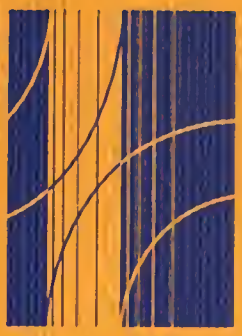

Joint Transportation Research Program

JTRP

FHWA/IN/JTRP-99/7

Final Report

SECOND PHASE STUDY OF CHANGES IN IN-SERVICE ASPHALT
Volume II: Appendices

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Indiana Department of Transportation

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SECOND PHASE STUDY OF CHANGES IN IN-SERVICE ASPHALT VOLUME II: APPENDICES

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The contents of this report reflect the views of the authors who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Federal Highway Administration and the Indiana Department of Transportation. This report does not constitute a standard, specification or regulation.

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APPENDICES

APPENDIX A

Stiffness of the Neat, RTFO, Mix, PAV, and In-service Asphalts

Table A-1 Neat, RTFO and Mix Stiffness Data for Project 14643

	Neat		RTFO		Mix	
Temp.	1	2	1	2	1	2
40	-	-	-	-	1.97E+05	5.12E+05
46	1.46E+04	1.48E+04	3.72E+04	4.51E+04	1.95E+05	1.93E+05
52	5.90E+03	5.85E+03	1.48E+04	1.81E+04	7.74E+04	7.90E+04
58	2.46E+03	2.53E+03	6.28E+03	7.15E+03	3.06E+04	3.20E+04
64	1.10E+03	1.10E+03	2.55E+03	3.18E+03	1.24E+04	1.36E+04
70	5.05E+02	5.07E+02	1.15E+03	1.33E+03	5.30E+03	5.93E+03
76	2.52E+02	2.53E+02	5.52E+02	6.05E+02	2.39E+03	2.71E+03
80	1.66E+02	1.66E+02	3.53E+02	3.85E+02	1.44E+03	1.59E+03

Table A-2 PAV and Average In-service Stiffness Data for Project 14643

	PAV			In-Service
Temp.	1	2		
			Average	Average
16	1.36E+07	1.54E+07	1.45E+07	1.75E+07
19	9.01E+06	1.01E+07	9.55E+06	1.28E+07
22	5.68E+06	6.55E+06	6.12E+06	8.71E+06
25	3.47E+06	4.04E+06	3.75E+06	5.72E+06
28	2.10E+06	2.49E+06	2.29E+06	3.69E+06
31	1.26E+06	1.55E+06	1.41E+06	2.36E+06

Table A-3 OWP In-service Stiffness Data for Project 14643

	In-service			
Temp.	OWP (6 inch)			
	TOP		BOTTOM	
16	2.14E+07	2.26E+07	1.47E+07	1.54E+07
19	1.49E+07	1.57E+07	1.02E+07	1.07E+07
22	1.02E+07	1.08E+07	6.93E+06	7.26E+06
25	6.92E+06	7.19E+06	4.64E+06	4.81E+06
28	4.59E+06	4.72E+06	3.05E+06	3.12E+06
31	3.01E+06	3.06E+06	1.98E+06	2.01E+06

Table A-4 BWP In-service Stiffness Data for Project 14643

Temp.	In-service			
	BWP (6 feet)			
	TOP		BOTTOM	
16	2.15E+06	2.25E+06	1.60E+07	1.65E+07
19	1.32E+06	1.39E+06	1.09E+07	1.15E+07
22	8.03E+05	8.34E+05	7.36E+06	7.69E+06
25	4.82E+05	4.95E+05	4.88E+06	5.04E+06
28	2.84E+05	2.90E+05	3.21E+06	3.27E+06
31	1.69E+05	1.72E+05	2.10E+06	2.13E+06

Table A-5 IWP In-service Stiffness Data for Project 14643

Temp.	In-service			
	IWP (2 feet)			
	TOP		BOTTOM	
16	1.87E+07	1.94E+07	1.49E+07	1.51E+07
19	1.47E+07	1.55E+07	1.17E+07	1.21E+07
22	1.01E+07	1.06E+07	7.82E+06	8.29E+06
25	6.57E+06	6.91E+06	5.02E+06	5.25E+06
28	4.14E+06	4.30E+06	3.19E+06	3.30E+06
31	2.62E+06	2.69E+06	2.00E+06	2.04E+06

Table A-6 Neat, RTFO, and Mix Stiffness Data for Project 14643

	Neat	RTFO	Mix
Temp.	Average	Average	Average
40	-	-	3.55E+05
46	1.47E+04	4.12E+04	1.94E+05
52	5.88E+03	1.65E+04	7.82E+04
58	2.50E+03	6.72E+03	3.13E+04
64	1.10E+03	2.86E+03	1.30E+04
70	5.06E+02	1.24E+03	5.62E+03
76	2.53E+02	5.79E+02	2.55E+03
80	1.66E+02	3.69E+02	1.52E+03

Table A-7 Neat, RTFO and Mix Stiffness Data for Project 15165-a

	Neat		RTFO		Mix	
Temp.	1	2	1	2	1	2
40	-	-	-	-	-	-
46	-	-	-	-	1.79E+05	1.81E+05
52	8.84E+03	9.49E+03	2.25E+04	2.51E+04	6.88E+04	7.12E+04
58	3.95E+03	3.98E+03	9.75E+03	9.89E+03	2.68E+04	2.73E+04
64	1.79E+03	1.83E+03	4.67E+03	4.34E+03	1.06E+04	1.07E+04
70	8.55E+02	8.82E+02	2.23E+03	1.96E+03	4.48E+03	4.70E+03
76	-	-	-	-	2.02E+03	2.16E+03
80	-	-	-	-	-	-

Table A-8 PAV and Average In-service Stiffness Data for Project 15165-a

	PAV			In-service	
Temp.	1	2	3		
				Average	Average
16	8.28E+06	9.19E+06	6.37E+06	7.94E+06	4.20E+07
19	5.45E+06	6.07E+06	4.14E+06	5.22E+06	3.07E+07
22	3.53E+06	3.99E+06	2.71E+06	3.41E+06	2.23E+07
25	2.23E+06	2.57E+06	1.74E+06	2.18E+06	1.61E+07
28	1.44E+06	1.64E+06	1.10E+06	1.40E+06	1.14E+07
31	8.99E+05	1.04E+06	6.95E+05	8.80E+05	7.93E+06

Table A-9 OWP and In-service Stiffness Data for Project 15165-a

	In service			
Temp.	OWP (6 inch)			
	TOP		BOTTOM	
16	4.22E+07	3.92E+07	7.66E+07	7.11E+07
19	3.07E+07	2.79E+07	5.72E+07	5.26E+07
22	2.19E+07	2.01E+07	4.27E+07	4.00E+07
25	1.54E+07	1.47E+07	3.14E+07	2.99E+07
28	1.06E+07	1.03E+07	2.28E+07	2.20E+07
31	7.38E+06	7.24E+06	1.63E+07	1.53E+07

Table A-10 BWP In-service Stiffness Data for Project 15165-a

Temp.	In service			
	BWP (6 feet)			
	TOP		BOTTOM	
16	3.05E+07	2.92E+07	2.19E+07	2.14E+07
19	2.23E+07	2.11E+07	1.60E+07	1.55E+07
22	1.60E+07	1.54E+07	1.16E+07	1.13E+07
25	1.14E+07	1.11E+07	8.22E+06	8.02E+06
28	7.95E+06	7.62E+06	5.76E+06	5.77E+06
31	5.63E+06	5.34E+06	4.00E+06	4.07E+06

Table A-11 IWP In-service Stiffness Data for Project 15165-a

Temp.	In service			
	IWP (2 feet)			
	TOP		BOTTOM	
16	5.41E+07	5.02E+07	3.55E+07	3.21E+07
19	3.90E+07	3.58E+07	2.56E+07	2.46E+07
22	2.78E+07	2.60E+07	1.82E+07	1.69E+07
25	1.95E+07	1.86E+07	1.28E+07	1.23E+07
28	1.35E+07	1.31E+07	8.87E+06	8.65E+06
31	9.21E+06	8.66E+06	6.07E+06	5.95E+06

Table A-12 Neat, RTFO, and Mix Stiffness Data for Project 15165-a

	Neat	RTFO	Mix
Temp.	Average	Average	Average
40	-	-	-
46	-	-	1.80E+05
52	9.16E+03	2.38E+04	7.00E+04
58	3.97E+03	9.82E+03	2.71E+04
64	1.81E+03	4.50E+03	1.07E+04
70	8.68E+02	2.10E+03	4.59E+03
76	-	-	2.09E+03
80	-	-	-

Table A-13 Neat, RTFO and Mix Stiffness Data for Project 15165-al

	Neat		RTFO		Mix	
Temp.	1	2	1	2	1	2
40	-	-	-	-	5.68E+05	3.83E+05
46	-	-	-	-	2.83E+05	2.36E+05
52	8.84E+03	9.49E+03	2.25E+04	2.51E+04	1.30E+05	1.06E+05
58	3.95E+03	3.98E+03	9.75E+03	9.89E+03	5.93E+04	4.74E+04
64	1.79E+03	1.83E+03	4.67E+03	4.34E+03	2.74E+04	2.14E+04
70	8.55E+02	8.82E+02	2.23E+03	1.96E+03	1.27E+04	9.79E+03
76	-	-	-	-	6.00E+03	4.63E+03
80	-	-	-	-	3.70E+03	2.87E+03

Table A-14 PAV Average In-service Stiffness Data for Project 15165-al

	PAV				In-service
Temp.	1	2	3		
				Average	Average
16	8.28E+06	9.19E+06	6.37E+06	7.94E+06	2.63E+07
19	5.45E+06	6.07E+06	4.14E+06	5.22E+06	1.96E+07
22	3.53E+06	3.99E+06	2.71E+06	3.41E+06	1.48E+07
25	2.23E+06	2.57E+06	1.74E+06	2.18E+06	1.06E+07
28	1.44E+06	1.64E+06	1.10E+06	1.40E+06	7.48E+06
31	8.99E+05	1.04E+06	6.95E+05	8.80E+05	5.16E+06

Table A-15 OWP In-service Stiffness Data for Project 15165-al

	In service			
Temp.	OWP (6 inch)			
	TOP		BOTTOM	
16	4.71E+07	-	4.81E+07	-
19	3.44E+07	-	3.51E+07	-
22	2.49E+07	-	2.51E+07	-
25	1.78E+07	-	1.78E+07	-
28	1.24E+07	-	1.23E+07	-
31	8.59E+06	-	8.34E+06	-

Table A-16 BWP In-service Stiffness Data for Project 15165-al

Temp.	In service			
	BWP (6 feet)			
	TOP		BOTTOM	
16	2.58E+07	-	1.11E+07	-
19	1.85E+07	-	7.79E+06	-
22	1.31E+07	-	5.39E+06	-
25	9.22E+06	-	3.71E+06	-
28	6.32E+06	-	2.57E+06	-
31	4.24E+06	-	1.76E+06	-

Table A-17 IWP In-service Stiffness Data for Project 15165-al

Temp.	In service			
	IWP (2 feet)			
	TOP		BOTTOM	
16	1.53E+06	-	2.42E+07	-
19	4.22E+06	-	1.74E+07	-
22	7.86E+06	-	1.24E+07	-
25	6.85E+06	-	8.59E+06	-
28	5.38E+06	-	5.86E+06	-
31	4.13E+06	-	3.92E+06	-

Table A-18 Neat, RTFO, and Mix Stiffness Data for Project 15165-al

	Neat	RTFO	Mix
Temp.	Average	Average	Average
40	-	-	4.76E+05
46	-	-	2.59E+05
52	9.16E+03	2.38E+04	1.18E+05
58	3.97E+03	9.82E+03	5.33E+04
64	1.81E+03	4.50E+03	2.44E+04
70	8.68E+02	2.10E+03	1.12E+04
76	-	-	5.31E+03
80	-	-	3.28E+03

Table A-19 Neat, RTFO and Mix Stiffness Data for Project 15165-b

	Neat		RTFO		Mix	
Temp.	1	2	1	2	1	2
40	-	-	-	-	4.01E+05	-
46	-	-	-	-	1.74E+05	-
52	8.84E+03	9.49E+03	2.25E+04	2.51E+04	6.63E+04	-
58	3.95E+03	3.98E+03	9.75E+03	9.89E+03	2.65E+04	-
64	1.79E+03	1.83E+03	4.67E+03	4.34E+03	1.05E+04	-
70	8.55E+02	8.82E+02	2.23E+03	1.96E+03	4.43E+03	-
76	-	-	-	-	1.96E+03	-
80	-	-	-	-	1.30E+03	-

Table A-20 PAV and Average In-service Stiffness Data for Project 15165-b

	PAV				In-service
Temp.	1	2	3		
				Average	Average
16	8.28E+06	9.19E+06	6.37E+06	7.94E+06	4.35E+07
19	5.45E+06	6.07E+06	4.14E+06	5.22E+06	3.18E+07
22	3.53E+06	3.99E+06	2.71E+06	3.41E+06	2.30E+07
25	2.23E+06	2.57E+06	1.74E+06	2.18E+06	1.65E+07
28	1.44E+06	1.64E+06	1.10E+06	1.40E+06	1.16E+07
31	8.99E+05	1.04E+06	6.95E+05	8.80E+05	8.10E+06

Table A-21 OWP In-service Stiffness Data for Project 15165-b

	In service			
Temp.	OWP (6 inch)			
	TOP		BOTTOM	
16	4.22E+07	-	7.66E+07	-
19	3.07E+07	-	5.72E+07	-
22	2.19E+07	-	4.27E+07	-
25	1.54E+07	-	3.14E+07	-
28	1.06E+07	-	2.28E+07	-
31	7.38E+06	-	1.63E+07	-

Table A-22 BWP In-service Stiffness Data for Project 15165-b

Temp.	In service			
	IWP (2 feet)			
	TOP		BOTTOM	
16	5.41E+07	-	3.55E+07	-
19	3.90E+07	-	2.56E+07	-
22	2.78E+07	-	1.82E+07	-
25	1.95E+07	-	1.28E+07	-
28	1.35E+07	-	8.87E+06	-
31	9.21E+06	-	6.07E+06	-

Table A-23 BWP In-service Stiffness Data for Project 15165-b

Temp.	In service			
	BWP (6 feet)			
	TOP		BOTTOM	
16	3.05E+07	-	2.19E+07	-
19	2.23E+07	-	1.60E+07	-
22	1.60E+07	-	1.16E+07	-
25	1.14E+07	-	8.22E+06	-
28	7.95E+06	-	5.76E+06	-
31	5.63E+06	-	4.00E+06	-

Table A-24 Neat, RTFO, and Mix Stiffness Data for Project 15165-b

	Neat	RTFO	Mix
Temp.	Average	Average	Average
40	-	-	4.01E+05
46	-	-	1.74E+05
52	9.16E+03	2.38E+04	6.63E+04
58	3.97E+03	9.82E+03	2.65E+04
64	1.81E+03	4.50E+03	1.05E+04
70	8.68E+02	2.10E+03	4.43E+03
76	-	-	1.96E+03
80	-	-	1.30E+03

Table A-25 Neat, RTFO and Mix Stiffness Data for Project 15165-b1

	Neat		RTFO		Mix	
Temp.	1	2	1	2	1	2
40	-	-	-	-	4.69E+05	4.63E+05
46	-	-	-	-	2.15E+05	2.27E+05
52	8.84E+03	9.49E+03	2.25E+04	2.51E+04	9.63E+04	1.02E+05
58	3.95E+03	3.98E+03	9.75E+03	9.89E+03	4.38E+04	4.57E+04
64	1.79E+03	1.83E+03	4.67E+03	4.34E+03	2.00E+04	2.05E+04
70	8.55E+02	8.82E+02	2.23E+03	1.96E+03	9.22E+03	9.40E+03
76	-	-	-	-	4.38E+03	4.41E+03
80	-	-	-	-	2.73E+03	2.74E+03

Table A-26 PAV and Average In-service Stiffness Data for Project 15165-b1

	PAV				In-service
Temp.	1	2	3		
				Average	Average
16	8.28E+06	9.19E+06	6.37E+06	7.94E+06	4.88E+07
19	5.45E+06	6.07E+06	4.14E+06	5.22E+06	3.57E+07
22	3.53E+06	3.99E+06	2.71E+06	3.41E+06	2.55E+07
25	2.23E+06	2.57E+06	1.74E+06	2.18E+06	1.79E+07
28	1.44E+06	1.64E+06	1.10E+06	1.40E+06	1.24E+07
31	8.99E+05	1.04E+06	6.95E+05	8.80E+05	8.36E+06

Table A-27 OWP In-service Stiffness Data for Project 15165-b1

	In service			
Temp.	OWP (6 inch)			
	TOP		BOTTOM	
16	6.79E+07	-	5.37E+07	-
19	5.03E+07	-	3.97E+07	-
22	3.65E+07	-	2.82E+07	-
25	2.60E+07	-	1.97E+07	-
28	1.81E+07	-	1.36E+07	-
31	1.25E+07	-	9.13E+06	-

Table A-28 IWP In-service Stiffness Data for Project 15165-b1

Temp.	In service			
	IWP (2 feet)			
	TOP		BOTTOM	
16	-	-	2.75E+07	-
19	-	-	2.00E+07	-
22	-	-	1.45E+07	-
25	-	-	1.00E+07	-
28	-	-	6.90E+06	-
31	-	-	4.59E+06	-

Table A-29 BWP In-service Stiffness Data for Project 15165-b1

Temp.	In service			
	BWP (6 feet)			
	TOP		BOTTOM	
16	-	-	4.60E+07	-
19	-	-	3.30E+07	-
22	-	-	2.30E+07	-
25	-	-	1.60E+07	-
28	-	-	1.08E+07	-
31	-	-	7.17E+06	-

Table A-30 Neat, RTFO, and Mix Stiffness Data for Project 15165-b1

	Neat	RTFO	Mix
Temp.	Average	Average	Average
40	-	-	4.66E+05
46	-	-	2.21E+05
52	9.16E+03	2.38E+04	9.91E+04
58	3.97E+03	9.82E+03	4.47E+04
64	1.81E+03	4.50E+03	2.02E+04
70	8.68E+02	2.10E+03	9.31E+03
76	-	-	4.40E+03
80	-	-	2.73E+03

Table A-31 Neat, RTFO and Mix Stiffness Data for Project 15308

	Neat		RTFO		Mix	
Temp.	1	2	1	2	1	2
40	-	-	-	-	-	-
46	-	-	-	-	1.68E+05	1.74E+05
52	6.37E+03	6.69E+03	1.82E+04	1.91E+04	-	-
58	2.69E+03	2.83E+03	7.39E+03	7.77E+03	-	-
64	1.18E+03	1.22E+03	3.11E+03	3.27E+03	-	-
70	5.52E+02	5.68E+02	1.34E+03	1.41E+03	-	-
76	-	-	-	-	1.50E+03	1.52E+03
80	-	-	-	-	-	-

Table A-32 PAV and Average In-service Stiffness Data for Project 15308

	PAV			In service
Temp.	1	2		
			Average	Average
16	2.37E+07	2.16E+07	2.27E+07	4.69E+07
19	1.61E+07	1.47E+07	1.54E+07	3.46E+07
22	1.07E+07	9.75E+06	1.02E+07	2.51E+07
25	7.09E+06	6.49E+06	6.79E+06	1.80E+07
28	4.56E+06	4.17E+06	4.36E+06	1.27E+07
31	2.87E+06	2.63E+06	2.75E+06	8.84E+06

Table A-33 OWP In-service Stiffness Data for Project 15308

	In service			
Temp.	OWP (6 inch)			
	TOP		BOTTOM	
16	4.55E+07	4.78E+07	5.39E+07	5.71E+07
19	3.29E+07	3.46E+07	4.12E+07	4.31E+07
22	2.39E+07	2.48E+07	2.99E+07	3.09E+07
25	1.67E+07	1.72E+07	2.24E+07	2.29E+07
28	1.15E+07	1.17E+07	1.67E+07	1.69E+07
31	7.81E+06	7.92E+06	1.20E+07	1.21E+07

Table A-34 IWP In-service Stiffness Data for Project 15308

Temp.	In service			
	IWP (2 feet)			
	TOP		BOTTOM	
16	4.20E+07	4.45E+07	3.67E+07	3.85E+07
19	3.05E+07	3.19E+07	2.59E+07	2.72E+07
22	2.19E+07	2.26E+07	1.86E+07	1.93E+07
25	1.53E+07	1.56E+07	1.35E+07	1.39E+07
28	1.04E+07	1.06E+07	9.29E+06	9.46E+06
31	7.04E+06	7.11E+06	6.71E+06	6.81E+06

Table A-35 BWP In-service Stiffness Data for Project 15308

Temp.	In service			
	BWP (6 feet)			
	TOP		BOTTOM	
16	3.86E+07	4.06E+07	5.74E+07	6.04E+07
19	2.82E+07	2.97E+07	4.38E+07	4.60E+07
22	2.02E+07	2.12E+07	3.28E+07	3.44E+07
25	1.42E+07	1.47E+07	2.42E+07	2.51E+07
28	9.81E+06	1.00E+07	1.76E+07	1.80E+07
31	6.62E+06	6.75E+06	1.25E+07	1.27E+07

Table A-36 Neat, RTFO, and Mix Stiffness Data for Project 15308

	Neat	RTFO	Mix
Temp.	Average	Average	Average
40	-	-	-
46	-	-	1.71E+05
52	6.53E+03	1.87E+04	6.01E+04
58	2.76E+03	7.58E+03	2.21E+04
64	1.20E+03	3.19E+03	9.06E+03
70	5.60E+02	1.37E+03	3.50E+03
76	-	-	1.51E+03
80	-	-	-

Table A-37 Neat, RTFO and Mix Stiffness Data for Project 15502

	Neat		RTFO		Mix	
Temp.	1	2	1	2	1	2
40	-	-	-	-	4.09E+05	3.39E+05
46	-	-	-	-	1.41E+05	1.58E+05
52	6.74E+03	6.89E+03	1.54E+04	1.41E+04	4.95E+04	4.60E+04
58	2.73E+03	2.83E+03	6.11E+03	5.84E+03	1.85E+04	1.79E+04
64	1.20E+03	1.31E+03	2.40E+03	2.36E+03	7.18E+03	6.97E+03
70	5.63E+02	5.92E+02	1.09E+03	1.12E+03	2.86E+03	2.76E+03
76	-	-	-	-	1.26E+03	1.26E+03
80	-	-	-	-	7.39E+02	5.99E+02

Table A-38 PAV and Average In-service Stiffness Data for Project 15502

	PAV			In service
Temp.	1	2		
			Average	Average
16	1.33E+07	1.20E+07	1.26E+07	2.82E+07
19	8.41E+06	8.20E+06	8.31E+06	2.12E+07
22	5.22E+06	5.10E+06	5.16E+06	1.60E+07
25	3.05E+06	2.93E+06	2.99E+06	1.22E+07
28	1.79E+06	1.67E+06	1.73E+06	8.28E+06
31	1.02E+06	9.85E+05	1.00E+06	5.50E+06

Table A-39 OWP In-service Stiffness Data for Project 15502

	In service			
Temp.	OWP (6 inch)			
	TOP		BOTTOM	
16	2.19E+07	2.45E+07	3.29E+07	3.52E+07
19	1.60E+07	1.81E+07	3.03E+07	3.24E+07
22	1.09E+07	1.23E+07	2.65E+07	2.86E+07
25	9.28E+06	1.05E+07	2.09E+07	2.24E+07
28	6.44E+06	7.44E+06	1.49E+07	1.59E+07
31	4.23E+06	4.96E+06	1.03E+07	1.10E+07

Table A-40 IWP In-service Stiffness Data for Project 15502

Temp.	In service			
	IWP (2 feet)			
	TOP		BOTTOM	
16	1.75E+07	1.93E+07	2.62E+07	3.16E+07
19	1.27E+07	1.43E+07	1.88E+07	2.27E+07
22	8.91E+06	1.01E+07	1.33E+07	1.64E+07
25	6.24E+06	7.10E+06	9.29E+06	1.14E+07
28	4.24E+06	4.87E+06	6.45E+06	7.75E+06
31	2.86E+06	3.32E+06	4.36E+06	5.30E+06

Table A-41 BWP In-service Stiffness Data for Project 15502

Temp.	In service			
	BWP (6 feet)			
	TOP		BOTTOM	
16	3.45E+07	3.83E+07	1.12E+07	1.21E+07
19	2.25E+07	2.47E+07	8.02E+06	8.32E+06
22	1.54E+07	1.73E+07	4.04E+06	5.18E+06
25	1.15E+07	1.30E+07	1.49E+06	2.99E+06
28	6.97E+06	7.87E+06	1.31E+06	1.68E+06
31	4.09E+06	4.66E+06	8.36E+05	9.94E+05

Table A-42 Neat, RTFO, and Mix Stiffness Data for Project 15502

	Neat	RTFO	Mix
Temp.	Average	Average	Average
40	-	-	3.74E+05
46	-	-	1.49E+05
52	6.82E+03	1.48E+04	4.78E+04
58	2.78E+03	5.98E+03	1.82E+04
64	1.26E+03	2.38E+03	7.07E+03
70	5.78E+02	1.11E+03	2.81E+03
76	-	-	1.26E+03
80	-	-	6.69E+02

Table A-43 Neat, RTFO and Mix Stiffness Data for Project 15404

	Neat		RTFO		Mix	
Temp.	1	2	1	2	1	2
40	5.60E+04	5.53E+04	-	-	2.12E+05	2.17E+05
46	2.13E+04	2.10E+04	-	-	9.99E+04	9.91E+04
52	8.55E+03	8.40E+03	2.51E+04	2.66E+04	4.32E+04	4.29E+04
58	3.69E+03	3.65E+03	9.89E+03	1.03E+04	1.88E+04	1.87E+04
64	1.63E+03	1.61E+03	4.34E+03	4.58E+03	8.26E+03	8.23E+03
70	7.39E+02	7.26E+02	1.96E+03	2.06E+03	3.78E+03	3.77E+03
76	3.63E+02	3.58E+02	-	-	1.82E+03	1.82E+03
80	2.33E+02	2.31E+02	-	-	1.14E+03	1.15E+03

Table A-44 PAV and Average In-service Stiffness Data for Project 15404

	PAV			In service
Temp.	1	2		
			Average	Average
16	1.64E+07	1.36E+07	1.50E+07	2.63E+07
19	1.16E+07	9.44E+06	1.05E+07	2.01E+07
22	7.90E+06	6.41E+06	7.16E+06	1.49E+07
25	5.36E+06	4.35E+06	4.85E+06	1.10E+07
28	3.60E+06	2.90E+06	3.25E+06	7.69E+06
31	2.36E+06	1.90E+06	2.13E+06	5.44E+06

Table-A-45 OWP In-service Stiffness Data for Project 15404

	In service			
Temp.	OWP (6 inch)			
	TOP		BOTTOM	
16	2.31E+07	2.59E+07	3.19E+07	3.36E+07
19	1.95E+07	2.17E+07	2.25E+07	2.36E+07
22	1.54E+07	1.69E+07	1.57E+07	1.65E+07
25	1.10E+07	1.22E+07	1.08E+07	1.12E+07
28	7.78E+06	8.44E+06	7.32E+06	7.48E+06
31	5.51E+06	6.01E+06	4.81E+06	4.90E+06

Table A-46 IWP In-service Stiffness Data for Project 15404

Temp.	In service			
	IWP (2 feet)			
	TOP		BOTTOM	
16	2.94E+07	3.23E+07	2.43E+07	2.66E+07
19	2.07E+07	2.26E+07	1.94E+07	2.06E+07
22	1.45E+07	1.57E+07	1.40E+07	1.54E+07
25	9.94E+06	1.08E+07	1.01E+07	1.08E+07
28	6.75E+06	7.22E+06	6.12E+06	6.84E+06
31	4.43E+06	4.76E+06	4.83E+06	5.46E+06

Table A-47 IWP In-service Stiffness Data for Project 15404

Temp.	In service			
	BWP (6 feet)			
	TOP		BOTTOM	
16	2.14E+07	2.39E+07	2.09E+07	2.27E+07
19	1.78E+07	1.97E+07	1.61E+07	1.75E+07
22	1.43E+07	1.60E+07	1.17E+07	1.28E+07
25	1.15E+07	1.31E+07	9.84E+06	1.08E+07
28	8.92E+06	1.00E+07	7.38E+06	7.98E+06
31	6.63E+06	7.37E+06	4.97E+06	5.55E+06

Table A-48 Neat, RTFO, and Mix Stiffness Data for Project 15404

	Neat	RTFO	Mix
Temp.	Avg	Avg	Avg
40	5.56E+04	-	2.14E+05
46	2.11E+04	-	9.95E+04
52	8.47E+03	2.59E+04	4.30E+04
58	3.67E+03	1.01E+04	1.87E+04
64	1.62E+03	4.46E+03	8.24E+03
70	7.32E+02	2.01E+03	3.77E+03
76	3.60E+02	-	1.82E+03
80	2.32E+02	-	1.15E+03

Table A-49 Neat, RTFO and Mix Stiffness Data for Project 15630

	Neat		RTFO		Mix	
Temp.	1	2	1	2	1	2
40	-	-	-	-	3.48E+05	4.10E+05
46	-	-	-	-	1.45E+05	1.85E+05
52	5.67E+03	5.73E+03	1.89E+04	1.75E+04	5.51E+04	7.92E+04
58	2.49E+03	2.60E+03	8.67E+03	8.57E+03	2.33E+04	3.37E+04
64	1.12E+03	1.17E+03	3.63E+03	3.23E+03	1.11E+04	1.46E+04
70	5.44E+02	5.48E+02	1.74E+03	1.70E+03	5.04E+03	6.64E+03
76	-	-	-	-	2.33E+03	3.10E+03
80	-	-	-	-	-	-

Table A-50 PAV and Average In-service Stiffness Data for Project 15630

	PAV			In service
Temp.	1	2		
			Average	Average
16	1.37E+07	1.22E+07	1.29E+07	1.98E+07
19	9.67E+06	8.51E+06	9.09E+06	1.38E+07
22	6.68E+06	5.73E+06	6.20E+06	9.78E+06
25	4.48E+06	3.77E+06	4.12E+06	6.81E+06
28	2.96E+06	2.52E+06	2.74E+06	4.70E+06
31	1.93E+06	1.65E+06	1.79E+06	3.21E+06

Table-A-51 OWP In-service Stiffness Data for Project 15630

	In service			
Temp.	OWP (6 inch)			
	TOP		BOTTOM	
16	2.58E+07	2.72E+07	1.40E+07	1.48E+07
19	1.86E+07	1.96E+07	9.34E+06	9.71E+06
22	1.36E+07	1.41E+07	6.30E+06	6.55E+06
25	9.75E+06	9.94E+06	4.16E+06	4.32E+06
28	6.94E+06	7.01E+06	2.70E+06	2.78E+06
31	4.84E+06	4.89E+06	1.72E+06	1.76E+06

Table A-52 IWP In-service Stiffness Data for Project 15630

Temp.	In service			
	IWP (2 feet)			
	TOP		BOTTOM	
16	2.08E+07	2.19E+07	1.87E+07	1.98E+07
19	1.48E+07	1.54E+07	1.28E+07	1.34E+07
22	1.06E+07	1.11E+07	8.84E+06	9.20E+06
25	7.53E+06	7.76E+06	6.06E+06	6.28E+06
28	5.25E+06	5.41E+06	4.12E+06	4.26E+06
31	3.64E+06	3.71E+06	2.79E+06	2.89E+06

Table A-53 BWP In-service Stiffness Data for Project 15630

Temp.	In service			
	BWP (6 feet)			
	TOP		BOTTOM	
16	1.46E+07	1.55E+07	1.62E+07	1.71E+07
19	1.03E+07	1.09E+07	1.10E+07	1.15E+07
22	7.33E+06	7.63E+06	7.51E+06	7.83E+06
25	5.12E+06	5.33E+06	5.06E+06	5.23E+06
28	3.54E+06	3.68E+06	3.35E+06	3.48E+06
31	2.40E+06	2.45E+06	2.21E+06	2.26E+06

Table A-54 Neat, RTFO, and Mix Stiffness Data for Project 15630

	Neat	RTFO	Mix
Temp.	Avg	Avg	Avg
40	-	-	3.79E+05
46	-	-	1.65E+05
52	5.70E+03	1.82E+04	6.71E+04
58	2.54E+03	8.62E+03	2.85E+04
64	1.14E+03	3.43E+03	1.29E+04
70	5.46E+02	1.72E+03	5.84E+03
76	-	-	2.71E+03
80	-	-	-

Table A-55 Neat, RTFO and Mix Stiffness Data for Project 15173

	Neat		RTFO		Mix	
Temp.	1	2	1	2	1	2
40	-	-	-	-	4.86E+05	-
46	7.16E+04	5.53E+04	-	-	2.01E+05	-
52	2.52E+04	2.01E+04	3.83E+04	-	8.14E+04	-
58	9.56E+03	7.43E+03	1.48E+04	-	3.36E+04	-
64	3.85E+03	2.89E+03	5.51E+03	-	1.36E+04	-
70	1.22E+03	1.22E+03	2.36E+03	-	5.73E+03	-
76	5.67E+02	5.67E+02	-	-	2.53E+03	-
80	-	-	-	-	1.47E+03	-

Table A-56 PAV and Average In-service Stiffness Data for Project 15173

	PAV			In service
Temp.	1	2	Average	Average
16	1.30E+07	-	1.30E+07	1.83E+07
19	9.28E+06	-	9.28E+06	1.28E+07
22	6.52E+06	-	6.52E+06	9.03E+06
25	4.49E+06	-	4.49E+06	6.28E+06
28	3.04E+06	-	3.04E+06	4.32E+06
31	1.99E+06	-	1.99E+06	2.93E+06

Table-A-57 OWP In-service Stiffness Data for Project 15173

	In service			
Temp.	OWP (6 inch)			
	TOP		BOTTOM	
16	2.58E+07	-	1.40E+07	-
19	1.86E+07	-	9.34E+06	-
22	1.36E+07	-	6.30E+06	-
25	9.75E+06	-	4.16E+06	-
28	6.94E+06	-	2.70E+06	-
31	4.84E+06	-	1.72E+06	-

Table A-58 BWP In-service Stiffness Data for Project 15173

Temp.	In service			
	BWP (6 feet)			
	TOP		BOTTOM	
16	1.46E+07	-	1.62E+07	-
19	1.03E+07	-	1.10E+07	-
22	7.33E+06	-	7.51E+06	-
25	5.12E+06	-	5.06E+06	-
28	3.54E+06	-	3.35E+06	-
31	2.40E+06	-	2.21E+06	-

Table A-59 IWP In-service Stiffness Data for Project 15173

Temp.	In service			
	IWP (2 feet)			
	TOP		BOTTOM	
16	2.08E+07	-	1.87E+07	-
19	1.48E+07	-	1.28E+07	-
22	1.06E+07	-	8.84E+06	-
25	7.53E+06	-	6.06E+06	-
28	5.25E+06	-	4.12E+06	-
31	3.64E+06	-	2.79E+06	-

Table A-60 Neat, RTFO, and Mix Stiffness Data for Project 15173

	Neat	RTFO	Mix
Temp.	Average	Average	Average
40	-	-	4.86E+05
46	6.35E+04	-	2.01E+05
52	2.27E+04	3.83E+04	8.14E+04
58	8.50E+03	1.48E+04	3.36E+04
64	3.37E+03	5.51E+03	1.36E+04
70	1.22E+03	2.36E+03	5.73E+03
76	5.67E+02	-	2.53E+03
80	-	-	1.47E+03

Table A-61 Neat, RTFO, and Mix Stiffness Data for Project 15174

Temp.	Neat		RTFO		Mix	
	1	2	1	2	1	2
40	-	-	-	-	-	-
46	1.94E+04	2.18E+04	-	-	-	-
52	8.03E+03	8.12E+03	-	-	5.63E+04	4.15E+04
58	3.40E+03	3.48E+03	3.81E+03	8.75E+03	2.21E+04	1.52E+04
64	1.54E+03	1.45E+03	3.71E+03	1.59E+03	8.50E+03	6.02E+03
70	7.04E+02	6.68E+02	6.87E+02	1.66E+03	3.50E+03	2.55E+03
76	3.52E+02	3.27E+02	7.94E+02	3.26E+02	1.48E+03	1.12E+03
80	-	-	-	-	-	-

Table A-62 PAV and Average In-service Stiffness Data for Project 15174

Temp.	PAV			In service
	1	2	Average	Average
16	1.21E+07	1.22E+07	1.21E+07	4.24E+07
19	8.22E+06	8.50E+06	8.22E+06	3.40E+07
22	5.13E+06	5.72E+06	5.13E+06	2.76E+07
25	2.95E+06	3.69E+06	2.95E+06	2.14E+07
28	1.69E+06	2.50E+06	1.69E+06	1.65E+07
31	9.87E+05	1.63E+05	9.87E+05	1.26E+07

Table A-63 OWP In service Stiffness Data for Project 15174

Temp	In service			
	OWP (6inch)			
	Top		Bottom	
16	-	-	-	-
19	-	-	-	-
22	-	-	-	-
25	-	-	-	-
28	-	-	-	-
31	-	-	-	-

Table A-64 IWP In-service Stiffness Data for Project 15174

Temp	In service			
	IWP (2ft)			
	Top		Bottom	
16	3.91E+07	3.71E+07	4.22E+07	4.02E+07
19	3.06E+07	3.01E+07	3.30E+07	3.20E+07
22	2.39E+07	2.46E+07	2.58E+07	2.68E+07
25	1.83E+07	1.83E+07	1.98E+07	2.04E+07
28	1.38E+07	1.43E+07	1.50E+07	1.55E+07
31	1.02E+07	1.15E+07	1.12E+07	1.23E+07

Table A-65 BWP In-service Stiffness Data for Project 15174

Temp	In service			
	BWP (6ft)			
	Top		Bottom	
16	4.52E+07	4.49E+07	4.50E+07	4.56E+07
19	3.68E+07	3.67E+07	3.61E+07	3.69E+07
22	3.12E+07	3.02E+07	2.90E+07	2.94E+07
25	2.48E+07	2.36E+07	2.26E+07	2.33E+07
28	1.92E+07	1.84E+07	1.74E+07	1.78E+07
31	1.45E+07	1.36E+07	1.33E+07	1.41E+07

Table A-66 Neat, RTFO, and Mix Stiffness Data for Project 15174

Temp.	Neat	RTFO	Mix
	Average	Average	Average
40	-	-	-
46	2.06E+04	-	-
52	8.08E+03	-	4.89E+04
58	3.44E+03	6.28E+03	1.87E+04
64	1.50E+03	2.65E+03	7.26E+03
70	6.86E+02	1.17E+03	3.03E+03
76	3.40E+02	5.60E+02	1.30E+03
80	-	-	-

Table A-67 Neat, RTFO Stiffness Data for Project 15309

Temp.	Neat		RTFO		Mix	
	1	2	1	2	1	2
40	-	-	-	-	-	-
46	-	-	-	-	-	-
52	6.39E+03	6.39E+03	1.72E+04	-	4.48E+04	4.75E+04
58	2.85E+03	2.71E+03	7.58E+03	-	2.25E+04	1.60E+04
64	1.21E+03	1.28E+03	3.51E+03	-	9.98E+03	6.96E+03
70	5.79E+02	6.11E+02	1.57E+03	-	4.89E+03	2.41E+03
76	-	-	-	-	-	-
80	-	-	-	-	-	-

Table A-68 PAV and Average In-service Stiffness Data for Project 15309

Temp.	PAV			In service
	1	2	Average	Average
16	8.14E+06	8.07E+06	8.11E+06	1.83E+07
19	4.24E+06	5.49E+06	4.87E+06	1.28E+07
22	3.61E+06	3.38E+06	3.50E+06	9.03E+06
25	2.30E+06	2.11E+06	2.21E+06	6.28E+06
28	1.34E+06	1.44E+06	1.39E+06	4.32E+06
31	-	-	-	2.93E+06

Table A-69 OWP In service Stiffness Data for Project 15309

Temp.	In service			
	OWP (6inch)			
	Top		Bottom	
16	2.58E+07	-	1.40E+07	-
19	1.86E+07	-	9.33E+06	-
22	1.36E+07	-	6.29E+06	-
25	9.74E+06	-	4.15E+06	-
28	6.93E+06	-	2.70E+06	-
31	4.84E+06	-	1.72E+06	-

Table A-70 IWP In-service Stiffness Data for Project 15309

Temp.	In service			
	IWP (2ft)			
	Top		Bottom	
16	2.08E+07	-	1.87E+07	-
19	1.48E+07	-	1.28E+07	-
22	1.06E+07	-	8.84E+06	-
25	7.53E+06	-	6.06E+06	-
28	5.25E+06	-	4.12E+06	-
31	3.64E+06	-	2.79E+06	-

Table A-71 BWP In-service Stiffness for Project 15309

Temp.	In service			
	BWP (6ft)			
	Top		Bottom	
16	1.46E+07	-	1.62E+07	-
19	1.03E+07	-	1.10E+07	-
22	7.33E+06	-	7.51E+06	-
25	5.12E+06	-	5.06E+06	-
28	3.54E+06	-	3.35E+06	-
31	2.40E+06	-	2.21E+06	-

Table A-72 Neat, RTFO, and Mix Stiffness Data for Project 14643

Temp.	Neat	RTFO	Mix
	Average	Average	Average
40	-	-	-
46	-	-	-
52	6.39E+03	1.72E+04	4.62E+04
58	2.78E+03	7.58E+03	1.93E+04
64	1.25E+03	3.51E+03	8.47E+03
70	5.95E+02	1.57E+03	3.65E+03
76	-	-	-
80	-	-	-

Table A-73 Neat, RTFO and Mix Stiffness Data for Project 15617

Temp	Neat		RTFO		Mix	
	1	2	1	2	1	2
40	6.37E+04	-	-	-	-	-
46	2.33E+04	-	-	-	-	-
52	5.41E+03	8.79E+03	1.36E+04	-	-	-
58	3.57E+03	1.25E+03	6.33E+03	-	-	-
64	5.95E+02	1.44E+03	3.60E+03	-	-	-
70	6.25E+02	-	1.54E+03	-	-	-
76	2.87E+02	-	-	-	-	-
80	1.76E+02	-	-	-	-	-

Table A-74 PAV and Average In-service Stiffness Data for Project 14643

Temp	PAV			In service
	1	2	Average	Average
16	1.38E+07	1.27E+06	1.38E+07	1.64E+07
19	9.04E+06	8.34E+06	9.04E+06	1.14E+07
22	5.73E+06	5.21E+06	5.73E+06	7.77E+06
25	3.51E+06	3.11E+06	3.51E+06	5.19E+06
28	2.15E+06	1.79E+06	2.15E+06	3.42E+06
31	1.34E+06	1.11E+06	1.34E+06	2.14E+06

Table A-75 OWP In-service Stiffness Data for Project 15617

	In service			
Temp	OWP (6inch)			
	Top		Bottom	
16	1.25E+07	-	2.87E+07	-
19	8.22E+06	-	2.07E+07	-
22	5.35E+06	-	1.45E+07	-
25	3.41E+06	-	9.94E+06	-
28	2.16E+06	-	6.63E+06	-
31	1.36E+06	-	4.30E+06	-

Table A-76 IWP In-service Stiffness Data for Project 15617

Temp.	In service			
	IWP (2ft)			
	Top		Bottom	
16	1.37E+07	-	2.43E+07	-
19	9.11E+06	-	1.69E+07	-
22	5.91E+06	-	1.16E+07	-
25	3.81E+06	-	7.68E+06	-
28	2.42E+06	-	5.02E+06	-
31	1.55E+06	-	2.79E+06	-

Table A-77 BWP In-service Stiffness Data for Project 15617

Temp.	In service			
	BWP (6ft)			
	Top		Bottom	
16	1.46E+07	-	4.80E+06	-
19	1.03E+07	-	3.09E+06	-
22	7.33E+06	-	1.94E+06	-
25	5.12E+06	-	1.21E+06	-
28	3.54E+06	-	7.43E+05	-
31	2.40E+06	-	4.41E+05	-

APPENDIX B

Statistical Analysis for RTFO and Mixes

```
options ls=72;
data ana;
input proj sample group temp stiff;
lstiff=log10(stiff);
label=group;
cards;
  14643      1      1  46  1.46E+04
  14643      1      1  52  5.90E+03
  14643      1      1  58  2.46E+03
  14643      1      1  64  1.10E+03
  14643      1      1  70  5.05E+02
  14643      1      1  76  2.52E+02
  14643      2      1  46  1.48E+04
  14643      2      1  52  5.85E+03
  14643      2      1  58  2.53E+03
  14643      2      1  64  1.10E+03
  14643      2      1  70  5.07E+02
  14643      2      1  76  2.53E+02
  14643      1      2  46  3.72E+04
  14643      1      2  52  1.48E+04
  14643      1      2  58  6.28E+03
  14643      1      2  64  2.55E+03
  14643      1      2  70  1.15E+03
  14643      1      2  76  5.52E+02
  14643      2      2  46  4.51E+04
  14643      2      2  52  1.81E+04
  14643      2      2  58  7.15E+03
  14643      2      2  64  3.18E+03
  14643      2      2  70  1.33E+03
  14643      2      2  76  6.05E+02
  14643      1      3  46  1.95E+05
  14643      1      3  52  7.74E+04
  14643      1      3  58  3.06E+04
  14643      1      3  64  1.24E+04
  14643      1      3  70  5.30E+03
  14643      1      3  76  2.39E+03
  14643      2      3  46  1.93E+05
  14643      2      3  52  7.90E+04
  14643      2      3  58  3.20E+04
  14643      2      3  64  1.36E+04
  14643      2      3  70  5.93E+03
  14643      2      3  76  2.71E+03
 151651      1      1  46     .
 151651      1      1  52  8.84E+03
 151651      1      1  58  3.95E+03
 151651      1      1  64  1.79E+03
 151651      1      1  70  8.55E+02
 151651      1      1  76     .
 151651      2      1  46     .
 151651      2      1  52  9.49E+03
 151651      2      1  58  3.98E+03
 151651      2      1  64  1.83E+03
 151651      2      1  70  8.82E+02
```

151651	2	1	76	.
151651	1	2	46	.
151651	1	2	52	2.25E+04
151651	1	2	58	9.75E+03
151651	1	2	64	4.67E+03
151651	1	2	70	2.23E+03
151651	1	2	76	.
151651	2	2	46	.
151651	2	2	52	2.51E+04
151651	2	2	58	9.89E+03
151651	2	2	64	4.34E+03
151651	2	2	70	1.96E+03
151651	2	2	76	.
151651	1	3	46	1.79E+05
151651	1	3	52	6.88E+04
151651	1	3	58	2.68E+04
151651	1	3	64	1.06E+04
151651	1	3	70	4.48E+03
151651	1	3	76	2.02E+03
151651	2	3	46	1.81E+05
151651	2	3	52	7.12E+04
151651	2	3	58	2.73E+04
151651	2	3	64	1.07E+04
151651	2	3	70	4.70E+03
151651	2	3	76	2.16E+03
1516511	1	1	46	.
1516511	1	1	52	8.84E+03
1516511	1	1	58	3.95E+03
1516511	1	1	64	1.79E+03
1516511	1	1	70	8.55E+02
1516511	1	1	76	.
1516511	2	1	46	.
1516511	2	1	52	9.49E+03
1516511	2	1	58	3.98E+03
1516511	2	1	64	1.83E+03
1516511	2	1	70	8.82E+02
1516511	2	1	76	.
1516511	1	2	46	.
1516511	1	2	52	2.25E+04
1516511	1	2	58	9.75E+03
1516511	1	2	64	4.67E+03
1516511	1	2	70	2.23E+03
1516511	1	2	76	.
1516511	2	2	46	.
1516511	2	2	52	2.51E+04
1516511	2	2	58	9.89E+03
1516511	2	2	64	4.34E+03
1516511	2	2	70	1.96E+03
1516511	2	2	76	.
1516511	1	3	46	2.83E+05
1516511	1	3	52	1.30E+05
1516511	1	3	58	5.93E+04
1516511	1	3	64	2.74E+04

1516511	1	3	70	1.27E+04
1516511	1	3	76	6.00E+03
1516511	2	3	46	2.36E+05
1516511	2	3	52	1.06E+05
1516511	2	3	58	4.74E+04
1516511	2	3	64	2.14E+04
1516511	2	3	70	9.79E+03
1516511	2	3	76	4.63E+03
151652	1	1	46	.
151652	1	1	52	8.84E+03
151652	1	1	58	3.95E+03
151652	1	1	64	1.79E+03
151652	1	1	70	8.55E+02
151652	1	1	76	.
151652	2	1	46	.
151652	2	1	52	9.49E+03
151652	2	1	58	3.98E+03
151652	2	1	64	1.83E+03
151652	2	1	70	8.82E+02
151652	2	1	76	.
151652	1	2	46	.
151652	1	2	52	2.25E+04
151652	1	2	58	9.75E+03
151652	1	2	64	4.67E+03
151652	1	2	70	2.23E+03
151652	1	2	76	.
151652	2	2	46	.
151652	2	2	52	2.51E+04
151652	2	2	58	9.89E+03
151652	2	2	64	4.34E+03
151652	2	2	70	1.96E+03
151652	2	2	76	.
151652	1	3	46	1.74E+05
151652	1	3	52	6.63E+04
151652	1	3	58	2.65E+04
151652	1	3	64	1.05E+04
151652	1	3	70	4.43E+03
151652	1	3	76	1.96E+03
151652	2	3	46	.
151652	2	3	52	.
151652	2	3	58	.
151652	2	3	64	.
151652	2	3	70	.
151652	2	3	76	.
1516521	1	1	46	.
1516521	1	1	52	8.84E+03
1516521	1	1	58	3.95E+03
1516521	1	1	64	1.79E+03
1516521	1	1	70	8.55E+02
1516521	1	1	76	.
1516521	2	1	46	.
1516521	2	1	52	9.49E+03
1516521	2	1	58	3.98E+03

1516521	2	1	64	1.83E+03
1516521	2	1	70	8.82E+02
1516521	2	1	76	.
1516521	1	2	46	.
1516521	1	2	52	2.25E+04
1516521	1	2	58	9.75E+03
1516521	1	2	64	4.67E+03
1516521	1	2	70	2.23E+03
1516521	1	2	76	.
1516521	2	2	46	.
1516521	2	2	52	2.51E+04
1516521	2	2	58	9.89E+03
1516521	2	2	64	4.34E+03
1516521	2	2	70	1.96E+03
1516521	2	2	76	.
1516521	1	3	46	2.15E+05
1516521	1	3	52	9.63E+04
1516521	1	3	58	4.38E+04
1516521	1	3	64	2.00E+04
1516521	1	3	70	9.22E+03
1516521	1	3	76	4.38E+03
1516521	2	3	46	2.27E+05
1516521	2	3	52	1.02E+05
1516521	2	3	58	4.57E+04
1516521	2	3	64	2.05E+04
1516521	2	3	70	9.40E+03
1516521	2	3	76	4.41E+03
15308	1	1	46	.
15308	1	1	52	6.37E+03
15308	1	1	58	2.69E+03
15308	1	1	64	1.18E+03
15308	1	1	70	5.52E+02
15308	1	1	76	.
15308	2	1	46	.
15308	2	1	52	6.69E+03
15308	2	1	58	2.83E+03
15308	2	1	64	1.22E+03
15308	2	1	70	5.68E+02
15308	2	1	76	.
15308	1	2	46	.
15308	1	2	52	1.82E+04
15308	1	2	58	7.39E+03
15308	1	2	64	3.11E+03
15308	1	2	70	1.34E+03
15308	1	2	76	.
15308	2	2	46	.
15308	2	2	52	1.91E+04
15308	2	2	58	7.77E+03
15308	2	2	64	3.27E+03
15308	2	2	70	1.41E+03
15308	2	2	76	.
15308	1	3	46	1.68E+05
15308	1	3	52	6.01E+04

15308	1	3	58	2.21E+04
15308	1	3	64	9.06E+03
15308	1	3	70	3.50E+03
15308	1	3	76	1.50E+03
15308	2	3	46	1.74E+05
15308	2	3	52	6.36E+04
15308	2	3	58	2.31E+04
15308	2	3	64	9.37E+03
15308	2	3	70	3.57E+03
15308	2	3	76	1.52E+03
15502	1	1	46	-
15502	1	1	52	6.74E+03
15502	1	1	58	2.73E+03
15502	1	1	64	1.20E+03
15502	1	1	70	5.63E+02
15502	1	1	76	-
15502	2	1	46	-
15502	2	1	52	6.89E+03
15502	2	1	58	2.83E+03
15502	2	1	64	1.31E+03
15502	2	1	70	5.92E+02
15502	2	1	76	-
15502	1	2	46	-
15502	1	2	52	1.54E+04
15502	1	2	58	6.11E+03
15502	1	2	64	2.40E+03
15502	1	2	70	1.09E+03
15502	1	2	76	-
15502	2	2	46	-
15502	2	2	52	1.41E+04
15502	2	2	58	5.84E+03
15502	2	2	64	2.36E+03
15502	2	2	70	1.12E+03
15502	2	2	76	-
15502	1	3	46	1.41E+05
15502	1	3	52	4.95E+04
15502	1	3	58	1.85E+04
15502	1	3	64	7.18E+03
15502	1	3	70	2.86E+03
15502	1	3	76	1.26E+03
15502	2	3	46	1.58E+05
15502	2	3	52	4.60E+04
15502	2	3	58	1.79E+04
15502	2	3	64	6.97E+03
15502	2	3	70	2.76E+03
15502	2	3	76	1.26E+03
154041	1	1	46	2.13E+04
154041	1	1	52	8.55E+03
154041	1	1	58	3.69E+03
154041	1	1	64	1.63E+03
154041	1	1	70	7.39E+02
154041	1	1	76	3.63E+02
154041	2	1	46	2.10E+04

154041	2	1	52	8.40E+03
154041	2	1	58	3.65E+03
154041	2	1	64	1.61E+03
154041	2	1	70	7.26E+02
154041	2	1	76	3.58E+02
154041	1	2	46	.
154041	1	2	52	2.51E+04
154041	1	2	58	9.89E+03
154041	1	2	64	4.34E+03
154041	1	2	70	1.96E+03
154041	1	2	76	.
154041	2	2	46	.
154041	2	2	52	2.66E+04
154041	2	2	58	1.03E+04
154041	2	2	64	4.58E+03
154041	2	2	70	2.06E+03
154041	2	2	76	.
154041	1	3	46	9.99E+04
154041	1	3	52	4.32E+04
154041	1	3	58	1.88E+04
154041	1	3	64	8.26E+03
154041	1	3	70	3.78E+03
154041	1	3	76	1.82E+03
154041	2	3	46	9.91E+04
154041	2	3	52	4.29E+04
154041	2	3	58	1.87E+04
154041	2	3	64	8.23E+03
154041	2	3	70	3.77E+03
154041	2	3	76	1.82E+03
15630	1	1	46	.
15630	1	1	52	5.67E+03
15630	1	1	58	2.49E+03
15630	1	1	64	1.12E+03
15630	1	1	70	5.44E+02
15630	1	1	76	.
15630	2	1	46	.
15630	2	1	52	5.73E+03
15630	2	1	58	2.60E+03
15630	2	1	64	1.17E+03
15630	2	1	70	5.48E+02
15630	2	1	76	.
15630	1	2	46	.
15630	1	2	52	1.89E+04
15630	1	2	58	8.67E+03
15630	1	2	64	3.63E+03
15630	1	2	70	1.74E+03
15630	1	2	76	.
15630	2	2	46	.
15630	2	2	52	1.75E+04
15630	2	2	58	8.57E+03
15630	2	2	64	3.23E+03
15630	2	2	70	1.70E+03
15630	2	2	76	.

15630	1	3	46	1.45E+05
15630	1	3	52	5.51E+04
15630	1	3	58	2.33E+04
15630	1	3	64	1.11E+04
15630	1	3	70	5.04E+03
15630	1	3	76	2.33E+03
15630	2	3	46	1.85E+05
15630	2	3	52	7.92E+04
15630	2	3	58	3.37E+04
15630	2	3	64	1.46E+04
15630	2	3	70	6.64E+03
15630	2	3	76	3.10E+03
15173	1	1	46	7.16E+04
15173	1	1	52	2.52E+04
15173	1	1	58	9.56E+03
15173	1	1	64	3.85E+03
15173	1	1	70	1.22E+03
15173	1	1	76	5.67E+02
15173	2	1	46	5.53E+04
15173	2	1	52	2.01E+04
15173	2	1	58	7.43E+03
15173	2	1	64	2.89E+03
15173	2	1	70	1.22E+03
15173	2	1	76	5.67E+02
15173	1	2	46	.
15173	1	2	52	3.83E+04
15173	1	2	58	1.48E+04
15173	1	2	64	5.51E+03
15173	1	2	70	2.36E+03
15173	1	2	76	.
15173	2	2	46	.
15173	2	2	52	.
15173	2	2	58	.
15173	2	2	64	.
15173	2	2	70	.
15173	2	2	76	.
15173	1	3	46	2.01E+05
15173	1	3	52	8.14E+04
15173	1	3	58	3.36E+04
15173	1	3	64	1.36E+04
15173	1	3	70	5.73E+03
15173	1	3	76	2.53E+03
15173	2	3	46	.
15173	2	3	52	.
15173	2	3	58	.
15173	2	3	64	.
15173	2	3	70	.
15173	2	3	76	.
15174	1	1	46	1.94E+04
15174	1	1	52	8.03E+03
15174	1	1	58	3.40E+03
15174	1	1	64	1.54E+03
15174	1	1	70	7.04E+02

15174	1	1	76	3.52E+02
15174	2	1	46	2.18E+04
15174	2	1	52	8.12E+03
15174	2	1	58	3.48E+03
15174	2	1	64	1.45E+03
15174	2	1	70	6.68E+02
15174	2	1	76	3.27E+02
15174	1	2	46	.
15174	1	2	52	.
15174	1	2	58	3.81E+03
15174	1	2	64	3.71E+03
15174	1	2	70	6.87E+02
15174	1	2	76	7.94E+02
15174	2	2	46	.
15174	2	2	52	.
15174	2	2	58	8.75E+03
15174	2	2	64	1.59E+03
15174	2	2	70	1.66E+03
15174	2	2	76	3.26E+02
15174	1	3	46	.
15174	1	3	52	5.63E+04
15174	1	3	58	2.21E+04
15174	1	3	64	8.50E+03
15174	1	3	70	3.50E+03
15174	1	3	76	1.48E+03
15174	2	3	46	.
15174	2	3	52	4.15E+04
15174	2	3	58	1.52E+04
15174	2	3	64	6.02E+03
15174	2	3	70	2.55E+03
15174	2	3	76	1.12E+03
15309	1	1	46	.
15309	1	1	52	6.39E+03
15309	1	1	58	2.85E+03
15309	1	1	64	1.21E+03
15309	1	1	70	5.79E+02
15309	1	1	76	.
15309	2	1	46	.
15309	2	1	52	6.39E+03
15309	2	1	58	2.71E+03
15309	2	1	64	1.28E+03
15309	2	1	70	6.11E+02
15309	2	1	76	.
15309	1	2	46	.
15309	1	2	52	1.72E+04
15309	1	2	58	7.58E+03
15309	1	2	64	3.51E+03
15309	1	2	70	1.57E+03
15309	1	2	76	.
15309	2	2	46	.
15309	2	2	52	.
15309	2	2	58	.
15309	2	2	64	.

```
15309    2    2  70    .
15309    2    2  76    .
15309    1    3  46    .
15309    1    3  52  4.48E+04
15309    1    3  58  2.25E+04
15309    1    3  64  9.98E+03
15309    1    3  70  4.89E+03
15309    1    3  76    .
15309    2    3  46    .
15309    2    3  52  4.75E+04
15309    2    3  58  1.60E+04
15309    2    3  64  6.96E+03
15309    2    3  70  2.41E+03
15309    2    3  76    .
15617    1    1  46  2.33E+04
15617    1    1  52  5.41E+03
15617    1    1  58  3.57E+03
15617    1    1  64  5.95E+02
15617    1    1  70  6.25E+02
15617    1    1  76  2.87E+02
15617    2    1  46    -
15617    2    1  52  8.79E+03
15617    2    1  58  1.25E+03
15617    2    1  64  1.44E+03
15617    2    1  70    .
15617    2    1  76    .
15617    1    2  46    .
15617    1    2  52  1.36E+04
15617    1    2  58  6.33E+03
15617    1    2  64  3.60E+03
15617    1    2  70  1.54E+03
15617    1    2  76    .
15617    2    2  46    .
15617    2    2  52    .
15617    2    2  58    .
15617    2    2  64    .
15617    2    2  70    .
15617    2    2  76    .
15617    1    3  46    .
15617    1    3  52    .
15617    1    3  58    .
15617    1    3  64    .
15617    1    3  70    .
15617    1    3  76    .
15617    2    3  46    .
15617    2    3  52    .
15617    2    3  58    .
15617    2    3  64    .
15617    2    3  70    .
15617    2    3  76    .
;
proc glm;
class label;
```

```
model lstiff=proj label sample temp;
run;

proc glm;
class label;
model lstiff=label temp;
where temp EQ 64;
estimate 'label 1 vs label 2' label 1 -1 0;
estimate 'label 1 vs label 3' label 1 0 -1;
estimate 'label 2 vs label 3' label 0 1 -1;
contrast 'label 1 vs label 2' label 1 -1 0;
contrast 'label 1 vs label 3' label 1 0 -1;
contrast 'label 2 vs label 3' label 0 1 -1;
run;
```

The SAS System 1
22:01 Friday, July 9, 1999

General Linear Models Procedure
Class Level Information

Class	Levels	Values
LABEL	3	1 2 3

Number of observations in data set = 468

NOTE: Due to missing values, only 343 observations can be used in this analysis.

General Linear Models Procedure

Dependent Variable: LSTIFF

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	148.59943	29.71989	1600.50	0.0001
Error	337	6.25778	0.01857		
Corrected Total	342	154.85722			

R-Square	C.V.	Root MSE	LSTIFF Mean
0.959590	3.591911	0.1363	3.7938

Source	DF	Type I SS	Mean Square	F Value	Pr > F
PROJ	1	3.60794	3.60794	194.30	0.0001
LABEL	2	44.45377	22.22689	1196.98	0.0001
SAMPLE	1	0.01358	0.01358	0.73	0.3931
TEMP	1	100.52414	100.52414	5413.52	0.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
PROJ	1	1.74079	1.74079	93.75	0.0001
LABEL	2	46.15805	23.07902	1242.87	0.0001
SAMPLE	1	0.01271	0.01271	0.68	0.4086
TEMP	1	100.52414	100.52414	5413.52	0.0001

The SAS System 3
22:01 Friday, July 9, 1999

General Linear Models Procedure
Class Level Information

Class	Levels	Values
LABEL	3	1 2 3

Number of observations in data set = 78

NOTE: Due to missing values, only 71 observations can be used in this analysis.

The SAS System 4
22:01 Friday, July 9, 1999

General Linear Models Procedure

Dependent Variable: LSTIFF

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	9.0662428	4.5331214	194.62	0.0001
Error	68	1.5838779	0.0232923		
Corrected Total	70	10.6501207			

R-Square	C.V.	Root MSE	LSTIFF Mean
0.851281	4.275033	0.1526	3.5700

Source	DF	Type I SS	Mean Square	F Value	Pr > F
LABEL	2	9.0662428	4.5331214	194.62	0.0001
TEMP	0	0.0000000	.	.	.

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LABEL	2	9.0662428	4.5331214	194.62	0.0001
TEMP	0	0.0000000	.	.	.

Contrast	DF	Contrast SS	Mean Square	F Value	Pr > F
label 1 vs label 2	1	1.8068095	1.8068095	77.57	0.0001
label 1 vs label 3	1	9.0627775	9.0627775	389.09	0.0001
label 2 vs label 3	1	2.6701389	2.6701389	114.64	0.0001

Parameter	Estimate	T for H0: Parameter=0	Pr > |T|	Std Error of Estimate
label 1 vs label 2				
	-0.38477215	-8.81	0.0001	0.04368716
label 1 vs label 3				
	-0.87207385	-19.73	0.0001	0.04421086
label 2 vs label 3				
	-0.48730170	-10.71	0.0001	0.04551320

Table B-1 RTFO/Mix t-statistics for Project 14643

RTFO	MIX
3.72E+04	1.95E+05
1.48E+04	7.74E+04
6.28E+03	3.06E+04
2.55E+03	1.24E+04
1.15E+03	5.30E+03
5.52E+02	2.39E+03
3.53E+02	1.44E+03
4.51E+04	1.93E+05
1.81E+04	7.90E+04
7.15E+03	3.20E+04
3.18E+03	1.36E+04
1.33E+03	5.93E+03
6.05E+02	2.71E+03
3.85E+02	1.59E+03

t-Test: Paired Two Sample for Means

	RTFO	*MIX*
Mean	9909.28571	46597.1428
Variance	207766444.7	457597236
Observations	14	14
Pearson Correlation	0.99269502	
Hypothesized Mean Difference	0	
df	13	
t Stat	-2.57232627	
P(T<=t) one-tail	0.01159569	
t Critical one-tail	1.77093170	
P(T<=t) two-tail	0.02319138	
t Critical two-tail	2.16036824	

Table B-2 RTFO/Mix t statistic at 64C for Project 14643

RTFO@64	MIX@64
2.55E+03	1.24E+04
3.18E+03	1.36E+04

t-Test: Paired Two Sample for Means

	RTFO@64	*MIX@64*
Mean	2862.5	13000
Variance	195312.5	720000
Observations	2	2
Pearson Correlation	1	
Hypothesized Mean Difference	0	
df	1	
t Stat	-35.26086957	
P(T<=t) one-tail	0.009024865	
t Critical one-tail	6.313748599	
P(T<=t) two-tail	0.01804973	
t Critical two-tail	12.7061503	

Table B-3 RTFO/Mix t-Statistics for Project 15165a

RTFO	MIX
2.25E+04	6.88E+04
9.75E+03	2.68E+04
4.67E+03	1.06E+04
2.23E+03	4.48E+03
2.51E+04	7.12E+04
9.89E+03	2.73E+04
4.34E+03	1.07E+04
1.96E+03	4.70E+03

t-Test: Paired Two Sample for Means

	RTFO	*MIX*
Mean	10055.0875	28083.0306
Variance	81467078.65	746416977.9
Observations	8	8
Pearson Correlation	0.998194381	
Hypothesized Mean Difference	0	
df	7	
t Stat	-2.783481827	
P(T<=t) one-tail	0.013580909	
t Critical one-tail	1.894577508	
P(T<=t) two-tail	0.027161818	
t Critical two-tail	2.36462256	

Table B-4 RTFO/Mix Statistics at 64C for Project 15165a

RTFO@64	MIX@64
4.67E+03	1.06E+04
4.34E+03	1.07E+04

t-Test: Paired Two Sample for Means

	RTFO@64	*MIX@64*
Mean	4502.45	10690.80891
Variance	55078.805	6000.726503
Observations	2	2
Pearson Correlation	-1	
Hypothesized Mean Difference	0	
df	1	
t Stat	-28.03644	
P(T<=t) one-tail	0.0113486	
t Critical one-tail	6.3137486	
P(T<=t) two-tail	0.0226972	
t Critical two-tail	12.70615	

Table B-5 RTFO/Mix t-Statistics for Project 15165a1

RTFO	MIX
2.25E+04	6.88E+04
9.75E+03	2.68E+04
4.67E+03	1.06E+04
2.23E+03	4.48E+03
2.51E+04	7.12E+04
9.89E+03	2.73E+04
4.34E+03	1.07E+04
1.96E+03	4.70E+03

t-Test: Paired Two Sample for Means

	RTFO	*MIX*
Mean	10055.0875	28083.0306
Variance	81467078.65	746416977.9
Observations	8	8
Pearson Correlation	0.998194381	
Hypothesized Mean Difference	0	
df	7	
t Stat	-2.783481827	
P(T<=t) one-tail	0.013580909	
t Critical one-tail	1.894577508	
P(T<=t) two-tail	0.027161818	
t Critical two-tail	2.36462256	

Table B-6 RTFO/Mix t-Statistics at 64C for Project 15165a1

RTFO@64	MIX@64
4.67E+03	1.06E+04
4.34E+03	1.07E+04

t-Test: Paired Two Sample for Means

	RTFO@64	*MIX@64*
Mean	4502.45	10690.80891
Variance	55078.805	6000.726503
Observations	2	2
Pearson Correlation	-1	
Hypothesized Mean Difference	0	
df	1	
t Stat	-28.03644	
P(T<=t) one-tail	0.0113486	
t Critical one-tail	6.3137486	
P(T<=t) two-tail	0.0226972	
t Critical two-tail	12.70615	

Table B-7 RTFO/Mix t-Statistics for Project 15165b

RTFO	MIX
2.25E+04	6.88E+04
9.75E+03	2.68E+04
4.67E+03	1.06E+04
2.23E+03	4.48E+03
2.51E+04	7.12E+04
9.89E+03	2.73E+04
4.34E+03	1.07E+04
1.96E+03	4.70E+03

t-Test: Paired Two Sample for Means

	RTFO	*MIX*
Mean	10055.0875	28083.0306
Variance	81467078.65	746416977.9
Observations	8	8
Pearson Correlation	0.998194381	
Hypothesized Mean Difference	0	
df	7	
t Stat	-2.783481827	
P(T<=t) one-tail	0.013580909	
t Critical one-tail	1.894577508	
P(T<=t) two-tail	0.027161818	
t Critical two-tail	2.36462256	

Table B-8 RTFO/Mix Statistics at 64C for Project 15165b

RTFO@64	MIX@64
4.67E+03	1.06E+04
4.34E+03	1.07E+04

t-Test: Paired Two Sample for Means

	RTFO@64	*MIX@64*
Mean	4502.45	10690.80891
Variance	55078.805	6000.726503
Observations	2	2
Pearson Correlation	-1	
Hypothesized Mean Difference	0	
df	1	
t Stat	-28.03644	
P(T<=t) one-tail	0.0113486	
t Critical one-tail	6.3137486	
P(T<=t) two-tail	0.0226972	
t Critical two-tail	12.70615	

Table B-9 RTFO/Mix t-Statistics for Project 15165b1

RTFO	MIX
2.25E+04	6.88E+04
9.75E+03	2.68E+04
4.67E+03	1.06E+04
2.23E+03	4.48E+03
2.51E+04	7.12E+04
9.89E+03	2.73E+04
4.34E+03	1.07E+04
1.96E+03	4.70E+03

t-Test: Paired Two Sample for Means

	RTFO	*MIX*
Mean	10055.0875	28083.0306
Variance	81467078.65	746416977.9
Observations	8	8
Pearson Correlation	0.998194381	
Hypothesized Mean Difference	0	
df	7	
t Stat	-2.783481827	
P(T<=t) one-tail	0.013580909	
t Critical one-tail	1.894577508	
P(T<=t) two-tail	0.027161818	
t Critical two-tail	2.36462256	

Table B-10 RTFO/Mix Statistics at 64C for Project 15165b1

RTFO@64	MIX@64
4.67E+03	1.06E+04
4.34E+03	1.07E+04

t-Test: Paired Two Sample for Means

	RTFO@64	*MIX@64*
Mean	4502.45	10690.80891
Variance	55078.805	6000.726503
Observations	2	2
Pearson Correlation	-1	
Hypothesized Mean Difference	0	
df	1	
t Stat	-28.03644	
P(T<=t) one-tail	0.0113486	
t Critical one-tail	6.3137486	
P(T<=t) two-tail	0.0226972	
t Critical two-tail	12.70615	

Table B-11 RTFO/Mix t-Statistics for Project 15308

RTFO	MIX
1.82E+0	6.01E+04
7.39E+0	2.21E+04
3.11E+0	9.06E+03
1.34E+0	3.50E+03
1.91E+0	6.36E+04
7.77E+0	2.31E+04
3.27E+0	9.37E+03
1.41E+0	3.57E+03

t-Test: Paired Two Sample for Means

	RTFO	*MIX*
Mean	7702.188	24309.34
Variance	51657113.0	593404477.7
Observations	8	8
Pearson Correlation	0.999439	
Hypothesized Mean Difference	0	
df	7	
t Stat	-2.734383	
P(T<=t) one-tail	0.014576	
t Critical one-tail	1.894577	
P(T<=t) two-tail	0.029153	
t Critical two-tail	2.364622	

Table B-12 RTFO/Mix Statistics at 64C for Project 15308

RTFO@64	MIX@64
3.11E+03	9.06E+03
3.27E+03	9.37E+03

t-Test: Paired Two Sample for Means

	RTFO@64	*MIX@64*
Mean	3193.3224	9213.8166
Variance	13096.87	47442.2262
Observations	2	2
Pearson Correlation	1	
Hypothesized Mean Difference	0	
df	1	
t Stat	-82.366237	
P(T<=t) one-tail	0.0038644	
t Critical one-tail	6.3137486	
P(T<=t) two-tail	0.0077288	
t Critical two-tail	12.70615	

Table B-13 RTFO/Mix t-Statistics for Project 15502

RTFO	MIX
1.54E+04	4.95E+04
6.11E+03	1.85E+04
2.40E+03	7.18E+03
1.09E+03	2.86E+03
1.41E+04	4.60E+04
5.84E+03	1.79E+04
2.36E+03	6.97E+03
1.12E+03	2.76E+03

t-Test: Paired Two Sample for Means

	RTFO	*MIX*
Mean	6052.5	18970.113
Variance	32588250	353178324
Observations	8	8
Pearson Correlation	0.9997846	
Hypothesized Mean Difference	0	
df	7	
t Stat	-2.7919904	
P(T<=t) one-tail	0.0134157	
t Critical one-tail	1.8945775	
P(T<=t) two-tail	0.0268314	
t Critical two-tail	2.3646226	

Table B-14 RTFO/Mix t-Statistics at 64C for Project 15502

RTFO@64	MIX@64
2.40E+03	7.18E+03
2.36E+03	6.97E+03

t-Test: Paired Two Sample for Means

	RTFO@64	*MIX@64*
Mean	2380	7074.56604
Variance	800	21067.4595
Observations	2	2
Pearson Correlation	1	
Hypothesized Mean Difference	0	
df	1	
t Stat	-56.811583	
P(T<=t) one-tail	0.0056023	
t Critical one-tail	6.3137486	
P(T<=t) two-tail	0.0112047	
t Critical two-tail	12.70615	

Table B-15 RTFO/Mix t-Statistics for Project 15404a

RTFO	MIX
2.51E+04	4.32E+04
9.89E+03	1.88E+04
4.34E+03	8.26E+03
1.96E+03	3.78E+03
2.66E+04	4.29E+04
1.03E+04	1.87E+04
4.58E+03	8.23E+03
2.06E+03	3.77E+03

t-Test: Paired Two Sample for Means

	RTFO	*MIX*
Mean	10611.7541	18441.76813
Variance	98714045.1	263729412.9
Observations	8	8
Pearson Correlation	0.9979194	
Hypothesized Mean Difference	0	
df	7	
t Stat	-3.4836628	
P(T<=t) one-tail	0.00510781	
t Critical one-tail	1.89457751	
P(T<=t) two-tail	0.01021563	
t Critical two-tail	2.36462256	

Table B-16 RTFO/Mix t-Statistics at 64C for Project 15404a

RTFO@64	MIX@64
4.34E+03	8.26E+03
4.58E+03	8.23E+03

t-Test: Paired Two Sample for Means

	RTFO@64	*MIX@64*
Mean	4459.09286	8242.882778
Variance	30058.0162	481.8097803
Observations	2	2
Pearson Correlation	-1	
Hypothesized Mean Difference	0	
df	1	
t Stat	-27.396143	
P(T<=t) one-tail	0.01161363	
t Critical one-tail	6.3137486	
P(T<=t) two-tail	0.02322726	
t Critical two-tail	12.7061503	

Table B-17 RTFO/Mix t-Statistics for Project 15630

RTFO	MIX
1.89E+04	5.51E+04
8.67E+03	2.33E+04
3.63E+03	1.11E+04
1.74E+03	5.04E+03
1.75E+04	7.92E+04
8.57E+03	3.37E+04
3.23E+03	1.46E+04
1.70E+03	6.64E+03

t-Test: Paired Two Sample for Means

	RTFO	*MIX*
Mean	7984.9375	28591.2201
Variance	47058686	693581688
Observations	8	8
Pearson Correlation	0.9451471	
Hypothesized Mean Difference	0	
df	7	
t Stat	-2.917326	
P(T<=t) one-tail	0.0112126	
t Critical one-tail	1.8945775	
P(T<=t) two-tail	0.0224253	
t Critical two-tail	2.3646226	

Table B-18 RTFO/Mix t-Statistics at 64C for Project 15630

RTFO@64	MIX@64
3.63E+03	1.11E+04
3.23E+03	1.46E+04

t-Test: Paired Two Sample for Means

	RTFO@64	*MIX@64*
Mean	3427.45	12860.7556
Variance	79560.605	6363567.76
Observations	2	2
Pearson Correlation	-1	
Hypothesized Mean Difference	0	
df	1	
t Stat	-4.756595	
P(T<=t) one-tail	0.0659591	
t Critical one-tail	6.3137486	
P(T<=t) two-tail	0.1319183	
t Critical two-tail	12.70615	

Table B-19 RTFO/Mix t-Statistics for Project 15174

RTFO	MIX
3.81E+03	2.21E+04
3.71E+03	8.50E+03
6.87E+02	3.50E+03
7.94E+02	1.48E+03
8.75E+03	1.52E+04
1.59E+03	6.02E+03
1.66E+03	2.55E+03
3.26E+02	1.12E+03

t-Test: Paired Two Sample for Means

	RTFO	*MIX*
Mean	2665.88	7558.75
Variance	7782852	56151441
Observations	8	8
Pearson Correlation	0.71945	
Hypothesized Mean Difference	0	
df	7	
t Stat	-2.3785	
P(T<=t) one-tail	0.0245	
t Critical one-tail	1.89458	
P(T<=t) two-tail	0.04899	
t Critical two-tail	2.36462	

Table B-20 RTFO/Mix t-Statistics at 64C for Project 15174

RTFO@64	MIX@64
3.71E+03	8.50E+03
1.59E+03	6.02E+03

t-Test: Paired Two Sample for Means

	RTFO@64	*MIX@64*
Mean	2650	7260
Variance	2247200	3075200
Observations	2	2
Pearson Correlation	1	
Hypothesized Mean Difference	0	
df	1	
t Stat	-25.611	
P(T<=t) one-tail	0.01242	
t Critical one-tail	6.31375	
P(T<=t) two-tail	0.02484	
t Critical two-tail	12.7062	

Table B-21 RTFO and Mix Project Data Summary Included in the Analysis

Temp.	Project 14643		Project 15165-a		Project 15165-a1	
	RTFO	Mix	RTFO	Mix	RTFO	Mix
52	1.65E+04	7.82E+04	2.38E+04	7.00E+04	2.38E+04	1.18E+05
58	6.72E+03	3.13E+04	9.82E+03	2.71E+04	9.82E+03	5.33E+04
64	2.86E+03	1.30E+04	4.50E+03	1.07E+04	4.50E+03	2.44E+04
70	1.24E+03	5.62E+03	2.10E+03	4.59E+03	2.10E+03	1.12E+04

Table B-22 RTFO and Mix Project Data Summary Included in the Analysis

Temp.	Project 15308		Project 15165-b		Project 15165-b1	
	RTFO	Mix	RTFO	Mix	RTFO	Mix
52	1.87E+04	6.19E+04	2.38E+04	6.63E+04	2.38E+04	9.91E+04
58	7.58E+03	2.26E+04	9.82E+03	2.65E+04	9.82E+03	4.47E+04
64	3.19E+03	9.21E+03	4.50E+03	1.05E+04	4.50E+03	2.02E+04
70	1.37E+03	3.53E+03	2.10E+03	4.43E+03	2.10E+03	9.31E+03

Table B-23 RTFO and Mix Project Data Summary Included in the Analysis

Temp.	Project 15502		Project 15404a		Project 15630	
	RTFO	Mix	RTFO	Mix	RTFO	Mix
52	1.48E+04	4.78E+04	2.59E+04	4.30E+04	1.82E+04	6.71E+04
58	5.98E+03	1.82E+04	1.01E+04	1.87E+04	8.62E+03	2.85E+04
64	2.38E+03	7.07E+03	4.46E+03	8.24E+03	3.43E+03	1.29E+04
70	1.11E+03	2.81E+03	2.01E+03	3.77E+03	1.72E+03	5.84E+03

Table B-24 RTFO and Mix Project Data Summary Included in the Analysis

Temp.	Project 15173		Project 15174		Project 15309		Project 15617	
	RTFO	Mix	RTFO	Mix	RTFO	Mix	RTFO	Mix
52	3.83E+04	8.14E+04	-	4.89E+04	1.72E+04	4.62E+04	1.36E+04	-
58	1.48E+04	3.36E+04	6.28E+03	1.87E+04	7.58E+03	1.93E+04	6.33E+03	-
64	5.51E+03	1.36E+04	2.65E+03	7.26E+03	3.51E+03	8.47E+03	3.60E+03	-
70	2.36E+03	5.73E+03	1.17E+03	3.03E+03	1.57E+03	3.65E+03	1.54E+03	-

Table B-25 RTFO/MIX t-statistic at 64C for all Projects

RTFO@64C	MIX@64C
2.86E+03	1.30E+04
4.50E+03	1.07E+04
4.50E+03	2.44E+04
4.50E+03	1.05E+04
4.50E+03	2.02E+04
3.19E+03	9.21E+03
2.38E+03	7.07E+03
4.46E+03	8.24E+03
3.43E+03	1.29E+04
5.51E+03	1.36E+04
2.65E+03	7.26E+03
3.51E+03	8.47E+03
3.60E+03	-

t-Test: Paired Two Sample for Means

	RTFO@64C	*MIX@64C*
Mean	3833.51377	12132.13582
Variance	920684.254	28258653.85
Observations	12	12
Pearson Correlation	0.47563833	
Hypothesized Mean Difference	0	
df	11	
t Stat	-5.82842246	
P(T<=t) one-tail	5.7217E-05	
t Critical one-tail	1.79588369	
P(T<=t) two-tail	0.00011443	
t Critical two-tail	2.20098627	

APPENDIX C

Statistical Analysis for PAV and In-service Asphalts as well as Variability Analysis due to Pavement Transverse Locations

```
options ls=72;

data analysis;

input proj sample loc tb temp stiff;

lstiff=log10(stiff);

cards;

14643      1      0      0      16      1.36E+07

14643      1      0      0      19      9.01E+06
14643      1      0      0      22      5.68E+06
14643      1      0      0      25      3.47E+06
14643      1      0      0      28      2.10E+06
14643      1      0      0      31      1.26E+06
14643      2      0      0      16      1.54E+07
14643      2      0      0      19      1.01E+07
14643      2      0      0      22      6.55E+06
14643      2      0      0      25      4.04E+06
14643      2      0      0      28      2.49E+06
14643      2      0      0      31      1.55E+06
14643      1      1      1      16      2.14E+07
14643      1      1      1      19      1.49E+07
14643      1      1      1      22      1.02E+07
14643      1      1      1      25      6.92E+06
14643      1      1      1      28      4.59E+06
14643      1      1      1      31      3.01E+06
14643      2      1      1      16      2.26E+07
14643      2      1      1      19      1.57E+07
14643      2      1      1      22      1.08E+07
14643      2      1      1      25      7.19E+06
14643      2      1      1      28      4.72E+06
14643      2      1      1      31      3.06E+06
14643      1      1      2      16      1.47E+07
14643      1      1      2      19      1.02E+07
14643      1      1      2      22      6.93E+06
14643      1      1      2      25      4.64E+06
14643      1      1      2      28      3.05E+06
14643      1      1      2      31      1.98E+06
14643      2      1      2      16      1.54E+07
14643      2      1      2      19      1.07E+07
14643      2      1      2      22      7.26E+06
14643      2      1      2      25      4.81E+06
14643      2      1      2      28      3.12E+06
14643      2      1      2      31      2.01E+06
14643      1      2      1      16      1.87E+07
14643      1      2      1      19      1.47E+07
14643      1      2      1      22      1.01E+07
14643      1      2      1      25      6.57E+06
14643      1      2      1      28      4.14E+06
14643      1      2      1      31      2.62E+06
14643      2      2      1      16      1.94E+07
```

14643	2	2	1	19	1.55E+07
14643	2	2	1	22	1.06E+07
14643	2	2	1	25	6.91E+06
14643	2	2	1	28	4.30E+06
14643	2	2	1	31	2.69E+06
14643	1	2	2	16	1.49E+07
14643	1	2	2	19	1.17E+07
14643	1	2	2	22	7.82E+06
14643	1	2	2	25	5.02E+06
14643	1	2	2	28	3.19E+06
14643	1	2	2	31	2.00E+06
14643	2	2	2	16	1.51E+07
14643	2	2	2	19	1.21E+07
14643	2	2	2	22	8.29E+06
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14643	2	2	2	28	3.30E+06
14643	2	2	2	31	2.04E+06
14643	1	3	1	16	2.15E+06
14643	1	3	1	19	1.32E+06
14643	1	3	1	22	8.03E+05
14643	1	3	1	25	4.82E+05
14643	1	3	1	28	2.84E+05
14643	1	3	1	31	1.69E+05
14643	2	3	1	16	2.25E+06
14643	2	3	1	19	1.39E+06
14643	2	3	1	22	8.34E+05
14643	2	3	1	25	4.95E+05
14643	2	3	1	28	2.90E+05
14643	2	3	1	31	1.72E+05
14643	1	3	2	16	1.60E+07
14643	1	3	2	19	1.09E+07
14643	1	3	2	22	7.36E+06
14643	1	3	2	25	4.88E+06
14643	1	3	2	28	3.21E+06
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14643	2	3	2	16	1.65E+07
14643	2	3	2	19	1.15E+07
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14643	2	3	2	31	2.13E+06
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151651	1	0	0	19	5.45E+06
151651	1	0	0	22	3.53E+06
151651	1	0	0	25	2.23E+06
151651	1	0	0	28	1.44E+06
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151651	2	0	0	31	6.95E+05
151651	1	1	1	16	4.22E+07

151651	1	1	1	19	3.07E+07
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151651	1	1	1	25	1.54E+07
151651	1	1	1	28	1.06E+07
151651	1	1	1	31	7.38E+06
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151651	2	1	1	31	7.24E+06
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151651	2	1	2	19	5.26E+07
151651	2	1	2	22	4.00E+07
151651	2	1	2	25	2.99E+07
151651	2	1	2	28	2.20E+07
151651	2	1	2	31	1.53E+07
151651	1	2	1	16	5.41E+07
151651	1	2	1	19	3.90E+07
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151651	2	2	2	28	8.65E+06
151651	2	2	2	31	5.95E+06
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151651	1	3	1	19	2.23E+07
151651	1	3	1	22	1.60E+07
151651	1	3	1	25	1.14E+07
151651	1	3	1	28	7.95E+06
151651	1	3	1	31	5.63E+06
151651	2	3	1	16	2.92E+07

151651	2	3	1	19	2.11E+07
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151651	2	3	1	25	1.11E+07
151651	2	3	1	28	7.62E+06
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151651	2	3	2	31	4.07E+06
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1516511	1	0	0	19	5.45E+06
1516511	1	0	0	22	3.53E+06
1516511	1	0	0	25	2.23E+06
1516511	1	0	0	28	1.44E+06
1516511	1	0	0	31	8.99E+05
1516511	2	0	0	16	6.37E+06
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1516511	2	0	0	31	6.95E+05
1516511	1	1	1	16	4.71E+07
1516511	1	1	1	19	3.44E+07
1516511	1	1	1	22	2.49E+07
1516511	1	1	1	25	1.78E+07
1516511	1	1	1	28	1.24E+07
1516511	1	1	1	31	8.59E+06
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1516511	2	1	1	22	.
1516511	2	1	1	25	.
1516511	2	1	1	28	.
1516511	2	1	1	31	.
1516511	1	1	2	16	4.81E+07
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1516511	1	1	2	22	2.51E+07
1516511	1	1	2	25	1.78E+07
1516511	1	1	2	28	1.23E+07
1516511	1	1	2	31	8.34E+06
1516511	2	1	2	16	.
1516511	2	1	2	19	.
1516511	2	1	2	22	.
1516511	2	1	2	25	.
1516511	2	1	2	28	.
1516511	2	1	2	31	.
1516511	1	2	1	16	1.53E+06

1516511	1	2	1	19	4.22E+06
1516511	1	2	1	22	7.86E+06
1516511	1	2	1	25	6.85E+06
1516511	1	2	1	28	5.38E+06
1516511	1	2	1	31	4.13E+06
1516511	2	2	1	16	.
1516511	2	2	1	19	.
1516511	2	2	1	22	.
1516511	2	2	1	25	.
1516511	2	2	1	28	.
1516511	2	2	1	31	.
1516511	1	2	2	16	2.42E+07
1516511	1	2	2	19	1.74E+07
1516511	1	2	2	22	1.24E+07
1516511	1	2	2	25	8.59E+06
1516511	1	2	2	28	5.86E+06
1516511	1	2	2	31	3.92E+06
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1516511	2	2	2	22	.
1516511	2	2	2	25	.
1516511	2	2	2	28	.
1516511	2	2	2	31	.
1516511	1	3	1	16	2.58E+07
1516511	1	3	1	19	1.85E+07
1516511	1	3	1	22	1.31E+07
1516511	1	3	1	25	9.22E+06
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1516511	1	3	1	31	4.24E+06
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1516511	2	3	1	22	.
1516511	2	3	1	25	.
1516511	2	3	1	28	.
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1516511	1	3	2	16	1.11E+07
1516511	1	3	2	19	7.79E+06
1516511	1	3	2	22	5.39E+06
1516511	1	3	2	25	3.71E+06
1516511	1	3	2	28	2.57E+06
1516511	1	3	2	31	1.76E+06
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1516511	2	3	2	19	.
1516511	2	3	2	22	.
1516511	2	3	2	25	.
1516511	2	3	2	28	.
1516511	2	3	2	31	.
151652	1	0	0	16	8.28E+06
151652	1	0	0	19	5.45E+06
151652	1	0	0	22	3.53E+06
151652	1	0	0	25	2.23E+06
151652	1	0	0	28	1.44E+06
151652	1	0	0	31	8.99E+05
151652	2	0	0	16	6.37E+06

151652	2	0	0	19	4.14E+06
151652	2	0	0	22	2.71E+06
151652	2	0	0	25	1.74E+06
151652	2	0	0	28	1.10E+06
151652	2	0	0	31	6.95E+05
151652	1	1	1	16	4.22E+07
151652	1	1	1	19	3.07E+07
151652	1	1	1	22	2.19E+07
151652	1	1	1	25	1.54E+07
151652	1	1	1	28	1.06E+07
151652	1	1	1	31	7.38E+06
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151652	2	1	1	22	.
151652	2	1	1	25	.
151652	2	1	1	28	.
151652	2	1	1	31	.
151652	1	1	2	16	7.66E+07
151652	1	1	2	19	5.72E+07
151652	1	1	2	22	4.27E+07
151652	1	1	2	25	3.14E+07
151652	1	1	2	28	2.28E+07
151652	1	1	2	31	1.63E+07
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151652	2	1	2	22	.
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151652	2	1	2	28	.
151652	2	1	2	31	.
151652	1	2	1	16	5.41E+07
151652	1	2	1	19	3.90E+07
151652	1	2	1	22	2.78E+07
151652	1	2	1	25	1.95E+07
151652	1	2	1	28	1.35E+07
151652	1	2	1	31	9.21E+06
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151652	2	2	1	19	.
151652	2	2	1	22	.
151652	2	2	1	25	.
151652	2	2	1	28	.
151652	2	2	1	31	.
151652	1	2	2	16	3.55E+07
151652	1	2	2	19	2.56E+07
151652	1	2	2	22	1.82E+07
151652	1	2	2	25	1.28E+07
151652	1	2	2	28	8.87E+06
151652	1	2	2	31	6.07E+06
151652	2	2	2	16	.
151652	2	2	2	19	.
151652	2	2	2	22	.
151652	2	2	2	25	.
151652	2	2	2	28	.
151652	2	2	2	31	.
151652	1	3	1	16	3.05E+07

151652	1	3	1	19	2.23E+07
151652	1	3	1	22	1.60E+07
151652	1	3	1	25	1.14E+07
151652	1	3	1	28	7.95E+06
151652	1	3	1	31	5.63E+06
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151652	2	3	1	19	.
151652	2	3	1	22	.
151652	2	3	1	25	.
151652	2	3	1	28	.
151652	2	3	1	31	.
151652	1	3	2	16	2.19E+07
151652	1	3	2	19	1.60E+07
151652	1	3	2	22	1.16E+07
151652	1	3	2	25	8.22E+06
151652	1	3	2	28	5.76E+06
151652	1	3	2	31	4.00E+06
151652	2	3	2	16	.
151652	2	3	2	19	.
151652	2	3	2	22	.
151652	2	3	2	25	.
151652	2	3	2	28	.
151652	2	3	2	31	.
1516521	1	0	0	16	8.28E+06
1516521	1	0	0	19	5.45E+06
1516521	1	0	0	22	3.53E+06
1516521	1	0	0	25	2.23E+06
1516521	1	0	0	28	1.44E+06
1516521	1	0	0	31	8.99E+05
1516521	2	0	0	16	6.37E+06
1516521	2	0	0	19	4.14E+06
1516521	2	0	0	22	2.71E+06
1516521	2	0	0	25	1.74E+06
1516521	2	0	0	28	1.10E+06
1516521	2	0	0	31	6.95E+05
1516521	1	1	1	16	6.79E+07
1516521	1	1	1	19	5.03E+07
1516521	1	1	1	22	3.65E+07
1516521	1	1	1	25	2.60E+07
1516521	1	1	1	28	1.81E+07
1516521	1	1	1	31	1.25E+07
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1516521	2	1	1	22	.
1516521	2	1	1	25	.
1516521	2	1	1	28	.
1516521	2	1	1	31	.
1516521	1	1	2	16	5.37E+07
1516521	1	1	2	19	3.97E+07
1516521	1	1	2	22	2.82E+07
1516521	1	1	2	25	1.97E+07
1516521	1	1	2	28	1.36E+07
1516521	1	1	2	31	9.13E+06
1516521	2	1	2	16	.

1516521	2	1	2	19	.
1516521	2	1	2	22	.
1516521	2	1	2	25	.
1516521	2	1	2	28	.
1516521	2	1	2	31	.
1516521	1	2	1	16	.
1516521	1	2	1	19	.
1516521	1	2	1	22	.
1516521	1	2	1	25	.
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1516521	1	2	2	19	2.00E+07
1516521	1	2	2	22	1.45E+07
1516521	1	2	2	25	1.00E+07
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1516521	1	2	2	31	4.59E+06
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1516521	2	3	1	22	.
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1516521	1	3	2	22	2.30E+07
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1516521	1	3	2	31	7.17E+06
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1516521	2	3	2	19	.
1516521	2	3	2	22	.
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1516521	2	3	2	28	.
1516521	2	3	2	31	.
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15308	1	0	0	22	1.07E+07
15308	1	0	0	25	7.09E+06
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15308	1	0	0	31	2.87E+06
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15308	2	0	0	19	1.47E+07
15308	2	0	0	22	9.75E+06
15308	2	0	0	25	6.49E+06
15308	2	0	0	28	4.17E+06
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154041	2	0	0	28	2.90E+06
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154041	2	2	1	31	4.76E+06
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154041	1	2	2	31	4.83E+06
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15630	1	0	0	22	6.68E+06
15630	1	0	0	25	4.48E+06
15630	1	0	0	28	2.96E+06
15630	1	0	0	31	1.93E+06
15630	2	0	0	16	1.22E+07
15630	2	0	0	19	8.51E+06
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15630	2	0	0	25	3.77E+06
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15630	2	1	1	19	1.96E+07
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15630	2	1	1	25	9.94E+06
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15630	2	2	1	31	3.71E+06
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15630	2	2	2	16	1.98E+07
15630	2	2	2	19	1.34E+07
15630	2	2	2	22	9.20E+06
15630	2	2	2	25	6.28E+06
15630	2	2	2	28	4.26E+06
15630	2	2	2	31	2.89E+06
15630	1	3	1	16	1.46E+07
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15630	1	3	2	19	1.10E+07
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15630	1	3	2	25	5.06E+06
15630	1	3	2	28	3.35E+06
15630	1	3	2	31	2.21E+06
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15630	2	3	2	19	1.15E+07
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15630	2	3	2	25	5.23E+06
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15630	2	3	2	31	2.26E+06
15173	1	0	0	16	1.30E+07
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15173	1	0	0	25	4.49E+06
15173	1	0	0	28	3.04E+06
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15173	1	1	1	16	2.58E+07
15173	1	1	1	19	1.86E+07
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15173	2	1	2	31	.
15173	1	2	1	16	2.08E+07
15173	1	2	1	19	1.48E+07
15173	1	2	1	22	1.06E+07
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15173	2	2	2	16	.
15173	2	2	2	19	.
15173	2	2	2	22	.
15173	2	2	2	25	.
15173	2	2	2	28	.
15173	2	2	2	31	.
15173	1	3	1	16	1.46E+07
15173	1	3	1	19	1.03E+07
15173	1	3	1	22	7.33E+06
15173	1	3	1	25	5.12E+06
15173	1	3	1	28	3.54E+06
15173	1	3	1	31	2.40E+06
15173	2	3	1	16	.
15173	2	3	1	19	.
15173	2	3	1	22	.
15173	2	3	1	25	.
15173	2	3	1	28	.
15173	2	3	1	31	.
15173	1	3	2	16	1.62E+07
15173	1	3	2	19	1.10E+07
15173	1	3	2	22	7.51E+06
15173	1	3	2	25	5.06E+06
15173	1	3	2	28	3.35E+06
15173	1	3	2	31	2.21E+06
15173	2	3	2	16	.
15173	2	3	2	19	.
15173	2	3	2	22	.
15173	2	3	2	25	.
15173	2	3	2	28	.
15173	2	3	2	31	.
15174	1	0	0	16	1.21E+07
15174	1	0	0	19	8.22E+06
15174	1	0	0	22	5.13E+06
15174	1	0	0	25	2.95E+06
15174	1	0	0	28	1.69E+06
15174	1	0	0	31	9.87E+05
15174	2	0	0	16	1.22E+07
15174	2	0	0	19	8.50E+06
15174	2	0	0	22	5.72E+06
15174	2	0	0	25	3.69E+06
15174	2	0	0	28	2.50E+06
15174	2	0	0	31	1.63E+05
15174	1	1	1	16	.

15174	1	1	1	19	.
15174	1	1	1	22	.
15174	1	1	1	25	.
15174	1	1	1	28	.
15174	1	1	1	31	.
15174	2	1	1	16	.
15174	2	1	1	19	.
15174	2	1	1	22	.
15174	2	1	1	25	.
15174	2	1	1	28	.
15174	2	1	1	31	.
15174	1	1	2	16	.
15174	1	1	2	19	.
15174	1	1	2	22	.
15174	1	1	2	25	.
15174	1	1	2	28	.
15174	1	1	2	31	.
15174	2	1	2	16	.
15174	2	1	2	19	.
15174	2	1	2	22	.
15174	2	1	2	25	.
15174	2	1	2	28	.
15174	2	1	2	31	.
15174	1	2	1	16	3.91E+07
15174	1	2	1	19	3.06E+07
15174	1	2	1	22	2.39E+07
15174	1	2	1	25	1.83E+07
15174	1	2	1	28	1.38E+07
15174	1	2	1	31	1.02E+07
15174	2	2	1	16	3.71E+07
15174	2	2	1	19	3.01E+07
15174	2	2	1	22	2.46E+07
15174	2	2	1	25	1.83E+07
15174	2	2	1	28	1.43E+07
15174	2	2	1	31	1.15E+07
15174	1	2	2	16	4.22E+07
15174	1	2	2	19	3.30E+07
15174	1	2	2	22	2.58E+07
15174	1	2	2	25	1.98E+07
15174	1	2	2	28	1.50E+07
15174	1	2	2	31	1.12E+07
15174	2	2	2	16	4.02E+07
15174	2	2	2	19	3.20E+07
15174	2	2	2	22	2.68E+07
15174	2	2	2	25	2.04E+07
15174	2	2	2	28	1.55E+07
15174	2	2	2	31	1.23E+07
15174	1	3	1	16	4.52E+07
15174	1	3	1	19	3.68E+07
15174	1	3	1	22	3.12E+07
15174	1	3	1	25	2.48E+07
15174	1	3	1	28	1.92E+07
15174	1	3	1	31	1.45E+07
15174	2	3	1	16	4.49E+07

15174	2	3	1	19	3.67E+07
15174	2	3	1	22	3.02E+07
15174	2	3	1	25	2.36E+07
15174	2	3	1	28	1.84E+07
15174	2	3	1	31	1.36E+07
15174	1	3	2	16	4.50E+07
15174	1	3	2	19	3.61E+07
15174	1	3	2	22	2.90E+07
15174	1	3	2	25	2.26E+07
15174	1	3	2	28	1.74E+07
15174	1	3	2	31	1.33E+07
15174	2	3	2	16	4.56E+07
15174	2	3	2	19	3.69E+07
15174	2	3	2	22	2.94E+07
15174	2	3	2	25	2.33E+07
15174	2	3	2	28	1.78E+07
15174	2	3	2	31	1.41E+07
15309	1	0	0	16	8.14E+06
15309	1	0	0	19	4.24E+06
15309	1	0	0	22	3.61E+06
15309	1	0	0	25	2.30E+06
15309	1	0	0	28	1.34E+06
15309	1	0	0	31	.
15309	2	0	0	16	8.07E+06
15309	2	0	0	19	5.49E+06
15309	2	0	0	22	3.38E+06
15309	2	0	0	25	2.11E+06
15309	2	0	0	28	1.44E+06
15309	2	0	0	31	.
15309	1	1	1	16	2.58E+07
15309	1	1	1	19	1.86E+07
15309	1	1	1	22	1.36E+07
15309	1	1	1	25	9.74E+06
15309	1	1	1	28	6.93E+06
15309	1	1	1	31	4.84E+06
15309	2	1	1	16	.
15309	2	1	1	19	.
15309	2	1	1	22	.
15309	2	1	1	25	.
15309	2	1	1	28	.
15309	2	1	1	31	.
15309	1	1	2	16	1.40E+07
15309	1	1	2	19	9.33E+06
15309	1	1	2	22	6.29E+06
15309	1	1	2	25	4.15E+06
15309	1	1	2	28	2.70E+06
15309	1	1	2	31	1.72E+06
15309	2	1	2	16	.
15309	2	1	2	19	.
15309	2	1	2	22	.
15309	2	1	2	25	.
15309	2	1	2	28	.
15309	2	1	2	31	.
15309	1	2	1	16	2.08E+07

15309	1	2	1	19	1.48E+07
15309	1	2	1	22	1.06E+07
15309	1	2	1	25	7.53E+06
15309	1	2	1	28	5.25E+06
15309	1	2	1	31	3.64E+06
15309	2	2	1	16	.
15309	2	2	1	19	.
15309	2	2	1	22	.
15309	2	2	1	25	.
15309	2	2	1	28	.
15309	2	2	1	31	.
15309	1	2	2	16	1.87E+07
15309	1	2	2	19	1.28E+07
15309	1	2	2	22	8.84E+06
15309	1	2	2	25	6.06E+06
15309	1	2	2	28	4.12E+06
15309	1	2	2	31	2.79E+06
15309	2	2	2	16	.
15309	2	2	2	19	.
15309	2	2	2	22	.
15309	2	2	2	25	.
15309	2	2	2	28	.
15309	2	2	2	31	.
15309	1	3	1	16	1.46E+07
15309	1	3	1	19	1.03E+07
15309	1	3	1	22	7.33E+06
15309	1	3	1	25	5.12E+06
15309	1	3	1	28	3.54E+06
15309	1	3	1	31	2.40E+06
15309	2	3	1	16	.
15309	2	3	1	19	.
15309	2	3	1	22	.
15309	2	3	1	25	.
15309	2	3	1	28	.
15309	2	3	1	31	.
15309	1	3	2	16	1.62E+07
15309	1	3	2	19	1.10E+07
15309	1	3	2	22	7.51E+06
15309	1	3	2	25	5.06E+06
15309	1	3	2	28	3.35E+06
15309	1	3	2	31	2.21E+06
15309	2	3	2	16	.
15309	2	3	2	19	.
15309	2	3	2	22	.
15309	2	3	2	25	.
15309	2	3	2	28	.
15309	2	3	2	31	.
15617	1	0	0	16	1.38E+07
15617	1	0	0	19	9.04E+06
15617	1	0	0	22	5.73E+06
15617	1	0	0	25	3.51E+06
15617	1	0	0	28	2.15E+06
15617	1	0	0	31	1.34E+06
15617	2	0	0	16	1.27E+06

15617	2	0	0	19	8.34E+06
15617	2	0	0	22	5.21E+06
15617	2	0	0	25	3.11E+06
15617	2	0	0	28	1.79E+06
15617	2	0	0	31	1.11E+06
15617	1	1	1	16	1.25E+07
15617	1	1	1	19	8.22E+06
15617	1	1	1	22	5.35E+06
15617	1	1	1	25	3.41E+06
15617	1	1	1	28	2.16E+06
15617	1	1	1	31	1.36E+06
15617	2	1	1	16	.
15617	2	1	1	19	.
15617	2	1	1	22	.
15617	2	1	1	25	.
15617	2	1	1	28	.
15617	2	1	1	31	.
15617	1	1	2	16	2.87E+07
15617	1	1	2	19	2.07E+07
15617	1	1	2	22	1.45E+07
15617	1	1	2	25	9.94E+06
15617	1	1	2	28	6.63E+06
15617	1	1	2	31	4.30E+06
15617	2	1	2	16	.
15617	2	1	2	19	.
15617	2	1	2	22	.
15617	2	1	2	25	.
15617	2	1	2	28	.
15617	2	1	2	31	.
15617	1	2	1	16	1.37E+07
15617	1	2	1	19	9.11E+06
15617	1	2	1	22	5.91E+06
15617	1	2	1	25	3.81E+06
15617	1	2	1	28	2.42E+06
15617	1	2	1	31	1.55E+06
15617	2	2	1	16	.
15617	2	2	1	19	.
15617	2	2	1	22	.
15617	2	2	1	25	.
15617	2	2	1	28	.
15617	2	2	1	31	.
15617	1	2	2	16	2.43E+07
15617	1	2	2	19	1.69E+07
15617	1	2	2	22	1.16E+07
15617	1	2	2	25	7.68E+06
15617	1	2	2	28	5.02E+06
15617	1	2	2	31	2.79E+06
15617	2	2	2	16	.
15617	2	2	2	19	.
15617	2	2	2	22	.
15617	2	2	2	25	.
15617	2	2	2	28	.
15617	2	2	2	31	.
15617	1	3	1	16	1.46E+07

```
15617      1      3      1      19      1.03E+07
15617      1      3      1      22      7.33E+06
15617      1      3      1      25      5.12E+06
15617      1      3      1      28      3.54E+06
15617      1      3      1      31      2.40E+06
15617      2      3      1      16      .
15617      2      3      1      19      .
15617      2      3      1      22      .
15617      2      3      1      25      .
15617      2      3      1      28      .
15617      2      3      1      31      .
15617      1      3      2      16      4.80E+06
15617      1      3      2      19      3.09E+06
15617      1      3      2      22      1.94E+06
15617      1      3      2      25      1.21E+06
15617      1      3      2      28      7.43E+05
15617      1      3      2      31      4.41E+05
15617      2      3      2      16      .
15617      2      3      2      19      .
15617      2      3      2      22      .
15617      2      3      2      25      .
15617      2      3      2      28      .
15617      2      3      2      31      .
;
proc glm;
class proj sample loc tb;
where temp eq 16;
model lstiff= Proj loc proj*loc sample(proj*loc) tb tb*proj tb*loc
tb*proj*loc sample*tb(proj*loc);
test h=proj e=sample(proj*loc);
test h=loc e=sample(proj*loc);
test h=loc*tb e=sample(proj*loc);
test h=tb e=tb*sample(proj*loc);
test h=tb*proj e=tb*sample(proj*loc);
test h=tb*loc e=tb*sample(proj*loc);
test h= tb*proj*loc e=tb*sample(proj*loc);
output out=new p=p r=r;
proc print data=new;
run;
```

```
The SAS System                                    1
                                                   13:40 Friday, August 27,
1999

                    General Linear Models Procedure
                        Class Level Information

Class     Levels    Values

PROJ          13    14643 15173 15174 15308 15309 15502 15617 15630
                    151651 151652 154041 1516511 1516521
```

SAMPLE	2	1 2
LOC	4	0 1 2 3
TB	3	0 1 2

Number of observations in data set = 182

NOTE: Due to missing values, only 139 observations can be used in this
analysis.

The SAS System

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General Linear Models Procedure

Dependent Variable: LSTIFF

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	138	13.734127	0.099523	.	.
Error	0	.	.		
Corrected Total	138	13.734127			

R-Square	C.V.	Root MSE	LSTIFF Mean
1.000000	0	0	7.3269

Source	DF	Type I SS	Mean Square	F Value	Pr > F
PROJ	12	4.1888756	0.3490730	.	.
LOC	3	3.8298387	1.2766129	.	.
PROJ*LOC	35	2.6235878	0.0749597	.	.
SAMPLE(PROJ*LOC)	32	0.5894403	0.0184200	.	.
TB	1	0.0094739	0.0094739	.	.
PROJ*TB	12	0.3045783	0.0253815	.	.
LOC*TB	2	0.0072481	0.0036240	.	.
PROJ*LOC*TB	21	2.1802356	0.1038207	.	.
SAMPLE*TB(PROJ*LOC)	20	0.0008489	0.0000424	.	.

Source	DF	Type III SS	Mean Square	F Value	Pr > F
PROJ	12	3.5378388	0.2948199	.	.
LOC	2	0.7258597	0.3629299	.	.
PROJ*LOC	23	1.3590096	0.0590874	.	.
SAMPLE(PROJ*LOC)	32	0.5894403	0.0184200	.	.
TB	1	0.0064905	0.0064905	.	.
PROJ*TB	12	0.3050802	0.0254234	.	.
LOC*TB	2	0.0302894	0.0151447	.	.
PROJ*LOC*TB	21	2.1802356	0.1038207	.	.
SAMPLE*TB(PROJ*LOC)	20	0.0008489	0.0000424	.	.

Tests of Hypotheses using the Type III MS for SAMPLE(PROJ*LOC) as an error term

Source	DF	Type III SS	Mean Square	F Value	Pr > F
PROJ	12	3.5378388	0.2948199	16.01	0.0001

General Linear Models Procedure

Dependent Variable: LSTIFF

Tests of Hypotheses using the Type III MS for SAMPLE(PROJ*LOC) as an error term

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LOC	2	0.7258597	0.3629299	19.70	0.0001

Tests of Hypotheses using the Type III MS for SAMPLE(PROJ*LOC) as an error term

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LOC*TB	2	0.0302894	0.0151447	0.82	0.4485

Tests of Hypotheses using the Type III MS for SAMPLE*TB(PROJ*LOC) as an error term

Source	DF	Type III SS	Mean Square	F Value	Pr > F

TB	1	0.0064905	0.0064905	152.91	0.0001

Tests of Hypotheses using the Type III MS for SAMPLE*TB(PROJ*LOC) as an error term

Source	DF	Type III SS	Mean Square	F Value	Pr > F
PROJ*TB	12	0.3050802	0.0254234	598.95	0.0001

Tests of Hypotheses using the Type III MS for SAMPLE*TB(PROJ*LOC) as an error term

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LOC*TB	2	0.0302894	0.0151447	356.80	0.0001

Tests of Hypotheses using the Type III MS for SAMPLE*TB(PROJ*LOC) as an error term

Source	DF	Type III SS	Mean Square	F Value	Pr > F
PROJ*LOC*TB	21	2.1802356	0.1038207	2445.92	0.0001

OBS	PROJ	SAMPLE	LOC	TB	TEMP	STIFF	LSTIFF	P	R
1	14643	1	0	0	16	13600000	7.13354	7.13354	1.77636E-15
2	14643	2	0	0	16	15400000	7.18752	7.18752	2.66454E-15
3	14643	1	1	1	16	21400000	7.33041	7.33041	1.77636E-15
4	14643	2	1	1	16	22600000	7.35411	7.35411	2.66454E-15
5	14643	1	1	2	16	14700000	7.16732	7.16732	3.55271E-15
6	14643	2	1	2	16	15400000	7.18752	7.18752	1.77636E-15
7	14643	1	2	1	16	18700000	7.27184	7.27184	1.77636E-15
8	14643	2	2	1	16	19400000	7.28780	7.28780	3.55271E-15
9	14643	1	2	2	16	14900000	7.17319	7.17319	2.66454E-15
10	14643	2	2	2	16	15100000	7.17898	7.17898	4.44089E-15
11	14643	1	3	1	16	2150000	6.33244	6.33244	1.77636E-15
12	14643	2	3	1	16	2250000	6.35218	6.35218	8.88178E-16
13	14643	1	3	2	16	16000000	7.20412	7.20412	3.55271E-15
14	14643	2	3	2	16	16500000	7.21748	7.21748	-5.3291E-15
15	151651	1	0	0	16	8280000	6.91803	6.91803	1.77636E-15

16	151651	2	0	0	16	6370000	6.80414	6.80414	8.88178E-16
17	151651	1	1	1	16	42200000	7.62531	7.62531	2.66454E-15
18	151651	2	1	1	16	39200000	7.59329	7.59329	3.55271E-15
19	151651	1	1	2	16	76600000	7.88423	7.88423	2.66454E-15
20	151651	2	1	2	16	71100000	7.85187	7.85187	2.66454E-15
21	151651	1	2	1	16	54100000	7.73320	7.73320	1.77636E-15
22	151651	2	2	1	16	50200000	7.70070	7.70070	8.88178E-16
23	151651	1	2	2	16	35500000	7.55023	7.55023	2.66454E-15
24	151651	2	2	2	16	32100000	7.50651	7.50651	2.66454E-15
25	151651	1	3	1	16	30500000	7.48430	7.48430	1.77636E-15
26	151651	2	3	1	16	29200000	7.46538	7.46538	8.88178E-16
27	151651	1	3	2	16	21900000	7.34044	7.34044	3.55271E-15
28	151651	2	3	2	16	21400000	7.33041	7.33041	-7.9936E-15
29	1516511	1	0	0	16	8280000	6.91803	6.91803	1.77636E-15
30	1516511	2	0	0	16	6370000	6.80414	6.80414	8.88178E-16
31	1516511	1	1	1	16	47100000	7.67302	7.67302	-1.2079E-13
32	1516511	2	1	1	16	.	.	.	.
33	1516511	1	1	2	16	48100000	7.68215	7.68215	1.24345E-13
34	1516511	2	1	2	16	.	.	.	.
35	1516511	1	2	1	16	1530000	6.18469	6.18469	-2.3093E-14
36	1516511	2	2	1	16	.	.	.	.
37	1516511	1	2	2	16	24200000	7.38382	7.38382	2.66454E-14
38	1516511	2	2	2	16	.	.	.	.
39	1516511	1	3	1	16	25800000	7.41162	7.41162	1.51879E-13
40	1516511	2	3	1	16	.	.	.	.
41	1516511	1	3	2	16	11100000	7.04532	7.04532	-1.501E-13
42	1516511	2	3	2	16	.	.	.	.
43	151652	1	0	0	16	8280000	6.91803	6.91803	1.77636E-15
44	151652	2	0	0	16	6370000	6.80414	6.80414	8.88178E-16
45	151652	1	1	1	16	42200000	7.62531	7.62531	2.66454E-15
46	151652	2	1	1	16	.	.	.	.
47	151652	1	1	2	16	76600000	7.88423	7.88423	1.77636E-15
48	151652	2	1	2	16	.	.	.	.
49	151652	1	2	1	16	54100000	7.73320	7.73320	2.66454E-15
50	151652	2	2	1	16	.	.	.	.

OBS	PROJ	SAMPLE	LOC	TB	TEMP	STIFF	LSTIFF	P	R
51	151652	1	2	2	16	35500000	7.55023	7.55023	2.66454E-15
52	151652	2	2	2	16	.	.	.	.
53	151652	1	3	1	16	30500000	7.48430	7.48430	0
54	151652	2	3	1	16	.	.	.	.
55	151652	1	3	2	16	21900000	7.34044	7.34044	1.77636E-15
56	151652	2	3	2	16	.	.	.	.
57	1516521	1	0	0	16	8280000	6.91803	6.91803	1.77636E-15
58	1516521	2	0	0	16	6370000	6.80414	6.80414	-2.0428E-14
59	1516521	1	1	1	16	67900000	7.83187	7.83187	1.27898E-13
60	1516521	2	1	1	16	.	.	.	.
61	1516521	1	1	2	16	53700000	7.72997	7.72997	-6.4837E-14
62	1516521	2	1	2	16	.	.	.	.

63	1516521	1	2	1	16	.	.	.	.
64	1516521	2	2	1	16	.	.	.	.
65	1516521	1	2	2	16	27500000	7.43933	7.43933	-5.7732E-14
66	1516521	2	2	2	16	.	.	.	.
67	1516521	1	3	1	16	.	.	.	.
68	1516521	2	3	1	16	.	.	.	.
69	1516521	1	3	2	16	46000000	7.66276	7.66276	1.74083E-13
70	1516521	2	3	2	16	.	.	.	.
71	15308	1	0	0	16	23700000	7.37475	7.37475	1.77636E-15
72	15308	2	0	0	16	21600000	7.33445	7.33445	1.77636E-15
73	15308	1	1	1	16	45500000	7.65801	7.65801	2.66454E-15
74	15308	2	1	1	16	47800000	7.67943	7.67943	3.55271E-15
75	15308	1	1	2	16	53900000	7.73159	7.73159	1.77636E-15
76	15308	2	1	2	16	57100000	7.75664	7.75664	8.88178E-16
77	15308	1	2	1	16	42000000	7.62325	7.62325	2.66454E-15
78	15308	2	2	1	16	44500000	7.64836	7.64836	2.66454E-15
79	15308	1	2	2	16	36700000	7.56467	7.56467	8.88178E-16
80	15308	2	2	2	16	38500000	7.58546	7.58546	3.55271E-15
81	15308	1	3	1	16	38600000	7.58659	7.58659	2.66454E-15
82	15308	2	3	1	16	40600000	7.60853	7.60853	3.55271E-15
83	15308	1	3	2	16	57400000	7.75891	7.75891	3.55271E-15
84	15308	2	3	2	16	60400000	7.78104	7.78104	8.88178E-15
85	15502	1	0	0	16	13300000	7.12385	7.12385	2.66454E-15
86	15502	2	0	0	16	12000000	7.07918	7.07918	2.66454E-15
87	15502	1	1	1	16	21900000	7.34044	7.34044	2.66454E-15
88	15502	2	1	1	16	24500000	7.38917	7.38917	3.55271E-15
89	15502	1	1	2	16	32900000	7.51720	7.51720	2.66454E-15
90	15502	2	1	2	16	35200000	7.54654	7.54654	8.88178E-16
91	15502	1	2	1	16	17500000	7.24304	7.24304	2.66454E-15
92	15502	2	2	1	16	19300000	7.28556	7.28556	1.77636E-15
93	15502	1	2	2	16	26200000	7.41830	7.41830	1.77636E-15
94	15502	2	2	2	16	31600000	7.49969	7.49969	1.77636E-15
95	15502	1	3	1	16	34500000	7.53782	7.53782	2.66454E-15
96	15502	2	3	1	16	38300000	7.58320	7.58320	1.77636E-15
97	15502	1	3	2	16	11200000	7.04922	7.04922	2.66454E-15
98	15502	2	3	2	16	12100000	7.08279	7.08279	7.99361E-15
99	154041	1	0	0	16	16400000	7.21484	7.21484	1.77636E-15
100	154041	2	0	0	16	13600000	7.13354	7.13354	1.77636E-15

OBS	PROJ	SAMPLE	LOC	TB	TEMP	STIFF	LSTIFF	P	R
101	154041	1	1	1	16	23100000	7.36361	7.36361	2.66454E-15
102	154041	2	1	1	16	25900000	7.41330	7.41330	1.77636E-15
103	154041	1	1	2	16	31900000	7.50379	7.50379	3.55271E-15
104	154041	2	1	2	16	33600000	7.52634	7.52634	2.66454E-15
105	154041	1	2	1	16	29400000	7.46835	7.46835	2.66454E-15
106	154041	2	2	1	16	32300000	7.50920	7.50920	2.66454E-15
107	154041	1	2	2	16	24300000	7.38561	7.38561	1.77636E-15
108	154041	2	2	2	16	26600000	7.42488	7.42488	4.44089E-15
109	154041	1	3	1	16	21400000	7.33041	7.33041	1.77636E-15

110	154041	2	3	1	16	23900000	7.37840	7.37840	-2.6645E-15
111	154041	1	3	2	16	20900000	7.32015	7.32015	1.77636E-15
112	154041	2	3	2	16	22700000	7.35603	7.35603	-6.2172E-15
113	15630	1	0	0	16	13700000	7.13672	7.13672	1.77636E-15
114	15630	2	0	0	16	12200000	7.08636	7.08636	2.66454E-15
115	15630	1	1	1	16	25800000	7.41162	7.41162	2.66454E-15
116	15630	2	1	1	16	27200000	7.43457	7.43457	2.66454E-15
117	15630	1	1	2	16	14000000	7.14613	7.14613	3.55271E-15
118	15630	2	1	2	16	14800000	7.17026	7.17026	8.88178E-16
119	15630	1	2	1	16	20800000	7.31806	7.31806	2.66454E-15
120	15630	2	2	1	16	21900000	7.34044	7.34044	3.55271E-15
121	15630	1	2	2	16	18700000	7.27184	7.27184	3.55271E-15
122	15630	2	2	2	16	19800000	7.29667	7.29667	1.77636E-15
123	15630	1	3	1	16	14600000	7.16435	7.16435	2.66454E-15
124	15630	2	3	1	16	15500000	7.19033	7.19033	3.55271E-15
125	15630	1	3	2	16	16200000	7.20952	7.20952	1.77636E-15
126	15630	2	3	2	16	17100000	7.23300	7.23300	-2.0428E-14
127	15173	1	0	0	16	13000000	7.11394	7.11394	1.77636E-15
128	15173	2	0	0	16	.	.	.	.
129	15173	1	1	1	16	25800000	7.41162	7.41162	2.66454E-15
130	15173	2	1	1	16	.	.	.	.
131	15173	1	1	2	16	14000000	7.14613	7.14613	3.55271E-15
132	15173	2	1	2	16	.	.	.	.
133	15173	1	2	1	16	20800000	7.31806	7.31806	2.66454E-15
134	15173	2	2	1	16	.	.	.	.
135	15173	1	2	2	16	18700000	7.27184	7.27184	2.66454E-15
136	15173	2	2	2	16	.	.	.	.
137	15173	1	3	1	16	14600000	7.16435	7.16435	4.44089E-15
138	15173	2	3	1	16	.	.	.	.
139	15173	1	3	2	16	16200000	7.20952	7.20952	-3.5527E-15
140	15173	2	3	2	16	.	.	.	.
141	15174	1	0	0	16	12100000	7.08279	7.08279	1.77636E-15
142	15174	2	0	0	16	12200000	7.08636	7.08636	8.88178E-16
143	15174	1	1	1	16	.	.	.	.
144	15174	2	1	1	16	.	.	.	.
145	15174	1	1	2	16	.	.	.	.
146	15174	2	1	2	16	.	.	.	.
147	15174	1	2	1	16	39100000	7.59218	7.59218	1.77636E-15
148	15174	2	2	1	16	37100000	7.56937	7.56937	8.88178E-16
149	15174	1	2	2	16	42200000	7.62531	7.62531	1.77636E-15
150	15174	2	2	2	16	40200000	7.60423	7.60423	3.55271E-15

OBS	PROJ	SAMPLE	LOC	TB	TEMP	STIFF	LSTIFF	P	R
151	15174	1	3	1	16	45200000	7.65514	7.65514	2.66454E-15
152	15174	2	3	1	16	44900000	7.65225	7.65225	8.88178E-16
153	15174	1	3	2	16	45000000	7.65321	7.65321	1.77636E-15
154	15174	2	3	2	16	45600000	7.65896	7.65896	1.59872E-14
155	15309	1	0	0	16	8140000	6.91062	6.91062	1.77636E-15
156	15309	2	0	0	16	8070000	6.90687	6.90687	1.77636E-15

157	15309	1	1	1	16	25800000	7.41162	7.41162	3.55271E-15
158	15309	2	1	1	16	.	.	.	.
159	15309	1	1	2	16	14000000	7.14613	7.14613	3.55271E-15
160	15309	2	1	2	16	.	.	.	.
161	15309	1	2	1	16	20800000	7.31806	7.31806	2.66454E-15
162	15309	2	2	1	16	.	.	.	.
163	15309	1	2	2	16	18700000	7.27184	7.27184	3.55271E-15
164	15309	2	2	2	16	.	.	.	.
165	15309	1	3	1	16	14600000	7.16435	7.16435	3.55271E-15
166	15309	2	3	1	16	.	.	.	.
167	15309	1	3	2	16	16200000	7.20952	7.20952	8.88178E-16
168	15309	2	3	2	16	.	.	.	.
169	15617	1	0	0	16	13800000	7.13988	7.13988	1.77636E-15
170	15617	2	0	0	16	1270000	6.10380	6.10380	1.77636E-15
171	15617	1	1	1	16	12500000	7.09691	7.09691	2.66454E-15
172	15617	2	1	1	16	.	.	.	.
173	15617	1	1	2	16	28700000	7.45788	7.45788	2.66454E-15
174	15617	2	1	2	16	.	.	.	.
175	15617	1	2	1	16	13700000	7.13672	7.13672	1.77636E-15
176	15617	2	2	1	16	.	.	.	.
177	15617	1	2	2	16	24300000	7.38561	7.38561	1.77636E-15
178	15617	2	2	2	16	.	.	.	.
179	15617	1	3	1	16	14600000	7.16435	7.16435	2.66454E-15
180	15617	2	3	1	16	.	.	.	.
181	15617	1	3	2	16	4800000	6.68124	6.68124	-5.3291E-15
182	15617	2	3	2	16	.	.	.	.

```
options ls=72;
data analysis;
input proj sample loc tb temp stiff;
lstiff=log10(stiff);
cards;

      "SAME DATA USED IN THE PREVIOUS PROGRAM"
;
proc glm;
class proj sample loc tb;
model lstiff= Proj loc proj*loc sample(proj*loc) tb tb*proj tb*loc
tb*proj*loc sample*tb(proj*loc) temp;
means proj Loc tb/snk;
output out=a;
run;
```

The SAS System 1
14:25 Friday, August 27, 1999

General Linear Models Procedure
Class Level Information

Class	Levels	Values
PROJ	13	14643 15173 15174 15308 15309 15502 15617 15630 151651 151652 154041 1516511 1516521
SAMPLE	2	1 2
LOC	4	0 1 2 3
TB	3	0 1 2

Number of observations in data set = 1092

NOTE: Due to missing values, only 832 observations can be used in this
analysis.

The SAS System
2
14:25 Friday, August 27, 1999

General Linear Models Procedure

Dependent Variable: LSTIFF

	Sum of	Mean

Source	DF	Squares	Square	F Value	Pr > F
Model	139	155.69061	1.12008	159.03	0.0001
Error	692	4.87384	0.00704		
Corrected Total	831	160.56446			

R-Square	C.V.	Root MSE	LSTIFF Mean
0.969646	1.207444	0.0839	6.9505

Source	DF	Type I SS	Mean Square	F Value	Pr > F
PROJ	12	29.351779	2.445982	347.29	0.0001
LOC	3	31.507983	10.502661	1491.19	0.0001
PROJ*LOC	35	17.934935	0.512427	72.76	0.0001
SAMPLE(PROJ*LOC)	32	0.500513	0.015641	2.22	0.0002
TB	1	0.001765	0.001765	0.25	0.6169
PROJ*TB	12	1.999390	0.166616	23.66	0.0001
LOC*TB	2	0.069447	0.034723	4.93	0.0075
PROJ*LOC*TB	21	13.092419	0.623449	88.52	0.0001
SAMPLE*TB(PROJ*LOC)	20	0.009886	0.000494	0.07	1.0000
TEMP	1	61.222498	61.222498	8692.52	0.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
PROJ	12	24.276512	2.023043	287.24	0.0001
LOC	2	5.415015	2.707508	384.42	0.0001
PROJ*LOC	23	6.742716	0.293162	41.62	0.0001
SAMPLE(PROJ*LOC)	32	0.500513	0.015641	2.22	0.0002
TB	1	0.033423	0.033423	4.75	0.0297

PROJ*TB	12	2.029204	0.169100	24.01
0.0001				
LOC*TB	2	0.131961	0.065980	9.37
0.0001				
PROJ*LOC*TB	21	13.092419	0.623449	88.52
0.0001				
SAMPLE*TB(PROJ*LOC)	20	0.009886	0.000494	0.07
1.0000				
TEMP	1	61.222498	61.222498	8692.52
0.0001				

General Linear Models Procedure

Student-Newman-Keuls test for variable: LSTIFF

NOTE: This test controls the type I experimentwise error rate under the complete null hypothesis but not under partial null hypotheses.

Alpha= 0.05 df= 692 MSE= 0.007043
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 58.05602

Number of Means	2	3	4	5
Critical Range	0.0305832	0.0365859	0.0401151	0.0426023

Number of Means	6	7	8	9
Critical Range	0.0445139	0.0460608	0.0473564	0.0484687

Number of Means	10	11	12	13
Critical Range	0.0494417	0.0503052	0.0510807	0.0517838

Means with the same letter are not significantly different.

SNK Grouping	Mean	N	PROJ
A	7.25106	84	15308
B	7.20358	60	15174
C	7.11090	84	151651
D	7.04309	84	154041
D			
D	7.02821	48	151652
E	6.99200	36	1516521

F	6.93534	84	15502
G	6.84158	48	1516511
G			
G	6.83833	84	15630
G			
G	6.83530	42	15173
H	6.78243	46	15309
I	6.66647	48	15617
I			
I	6.65545	84	14643

The SAS System

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14:25 Friday, August 27, 1999

General Linear Models Procedure

Student-Newman-Keuls test for variable: LSTIFF

NOTE: This test controls the type I experimentwise error rate under the complete null hypothesis but not under partial null hypotheses.

Alpha= 0.05 df= 692 MSE= 0.007043
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 200.6683

Number of Means	2	3	4
Critical Range	0.01645	0.0196788	0.0215771

Means with the same letter are not significantly different.

SNK Grouping	Mean	N	LOC
A	7.125986	216	1
B	7.051418	234	2
C	6.929110	234	3
D	6.568618	148	0

The SAS System

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14:25 Friday, August 27, 1999

General Linear Models Procedure

Student-Newman-Keuls test for variable: LSTIFF

NOTE: This test controls the type I experimentwise error rate under the complete null hypothesis but not under partial null hypotheses.

Alpha= 0.05 df= 692 MSE= 0.007043
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 237.9723

Number of Means	2	3
Critical Range	0.0151058	0.0180707

Means with the same letter are not significantly different.

SNK Grouping	Mean	N	TB
A	7.033917	348	2
A			
A	7.032302	336	1
B	6.568618	148	0

The SAS System 1
11:03 Friday, August 6, 1999

General Linear Models Procedure
Class Level Information

Class	Levels	Values
PROJ	13	14643 15173 15174 15308 15309 15502 15617 15630 151651 151652 154041 1516511 1516521
SAMPLE	2	1 2
LOC	4	0 1 2 3
TB	3	0 1 2

Number of observations in data set = 182

NOTE: Due to missing values, only 139 observations can be used in this
analysis.

The SAS System

2

11:03 Friday, August 6, 1999

General Linear Models Procedure

Dependent Variable: LSTIFF

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	138	19.153587	0.138794	.	.
Error	0	.	.		
Corrected Total	138	19.153587			

R-Square	C.V.	Root MSE	LSTIFF Mean
1.000000	0	0	6.7128

Source	DF	Type I SS	Mean Square	F Value	Pr > F
PROJ	12	6.1164845	0.5097070	.	.
LOC	3	6.5114021	2.1704674	.	.
PROJ*LOC	35	3.4642957	0.0989799	.	.
SAMPLE(PROJ*LOC)	32	0.0752677	0.0023521	.	.
TB	1	0.0061582	0.0061582	.	.
PROJ*TB	12	0.4721208	0.0393434	.	.
LOC*TB	2	0.0196529	0.0098265	.	.
PROJ*LOC*TB	21	2.4864080	0.1184004	.	.
SAMPLE*TB(PROJ*LOC)	20	0.0017973	0.0000899	.	.

Source	DF	Type III SS	Mean Square	F Value	Pr > F

PROJ	12	5.0323086	0.4193591	.	.
LOC	2	1.0077095	0.5038548	.	.
PROJ*LOC	23	1.3467805	0.0585557	.	.
SAMPLE(PROJ*LOC)	32	0.0752677	0.0023521	.	.
TB	1	0.0226107	0.0226107	.	.
PROJ*TB	12	0.4797047	0.0399754	.	.
LOC*TB	2	0.0292258	0.0146129	.	.
PROJ*LOC*TB	21	2.4864080	0.1184004	.	.
SAMPLE*TB(PROJ*LOC)	20	0.0017973	0.0000899	.	.

Tests of Hypotheses using the Type III MS for
SAMPLE(PROJ*LOC) as an error term

Source	DF	Type III SS	Mean Square	F Value	Pr > F
PROJ	12	5.0323086	0.4193591	178.29	0.0001

General Linear Models Procedure

Dependent Variable: LSTIFF

Tests of Hypotheses using the Type III MS for
SAMPLE(PROJ*LOC) as an error term

Source	DF	Type III SS	Mean Square	F Value	Pr > F
LOC	2	1.0077095	0.5038548	214.21	0.0001

Tests of Hypotheses using the Type III MS for
SAMPLE(PROJ*LOC) as an error term

Source	DF	Type III SS	Mean Square	F Value	Pr > F

LOC*TB 2 0.0292258 0.0146129 6.21
0.0053

Tests of Hypotheses using the Type III MS for
SAMPLE*TB(PROJ*LOC) as an error term

Source DF Type III SS Mean Square F Value Pr
> F

TB 1 0.0226107 0.0226107 251.61
0.0001

Tests of Hypotheses using the Type III MS for
SAMPLE*TB(PROJ*LOC) as an error term

Source DF Type III SS Mean Square F Value Pr
> F

PROJ*TB 12 0.4797047 0.0399754 444.85
0.0001

Tests of Hypotheses using the Type III MS for
SAMPLE*TB(PROJ*LOC) as an error term

Source DF Type III SS Mean Square F Value Pr
> F

LOC*TB 2 0.0292258 0.0146129 162.61
0.0001

Tests of Hypotheses using the Type III MS for
SAMPLE*TB(PROJ*LOC) as an error term

Source DF Type III SS Mean Square F Value Pr
> F

PROJ*LOC*TB 21 2.4864080 0.1184004 1317.56
0.0001

The SAS System

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OBS	PROJ	SAMPLE	LOC	TB	TEMP	STIFF	LSTIFF	P	R
1	14643	1	0	0	28	2100000	6.32222	6.32222	-8.8818E-16
2	14643	2	0	0	28	2490000	6.39620	6.39620	-8.8818E-16
3	14643	1	1	1	28	4590000	6.66181	6.66181	0
4	14643	2	1	1	28	4720000	6.67394	6.67394	8.88178E-16
5	14643	1	1	2	28	3050000	6.48430	6.48430	8.88178E-16
6	14643	2	1	2	28	3120000	6.49415	6.49415	-1.7764E-15
7	14643	1	2	1	28	4140000	6.61700	6.61700	-8.8818E-16
8	14643	2	2	1	28	4300000	6.63347	6.63347	0
9	14643	1	2	2	28	3190000	6.50379	6.50379	8.88178E-16
10	14643	2	2	2	28	3300000	6.51851	6.51851	0
11	14643	1	3	1	28	284000	5.45332	5.45332	-8.8818E-16
12	14643	2	3	1	28	290000	5.46240	5.46240	5.32907E-15
13	14643	1	3	2	28	3210000	6.50651	6.50651	-8.8818E-16
14	14643	2	3	2	28	3270000	6.51455	6.51455	-1.8652E-14
15	151651	1	0	0	28	1440000	6.15836	6.15836	-8.8818E-16
16	151651	2	0	0	28	1100000	6.04139	6.04139	-1.7764E-15
17	151651	1	1	1	28	10600000	7.02531	7.02531	0
18	151651	2	1	1	28	10300000	7.01284	7.01284	0
19	151651	1	1	2	28	22800000	7.35793	7.35793	0
20	151651	2	1	2	28	22000000	7.34242	7.34242	-1.7764E-15
21	151651	1	2	1	28	13500000	7.13033	7.13033	-8.8818E-16
22	151651	2	2	1	28	13100000	7.11727	7.11727	-1.7764E-15
23	151651	1	2	2	28	8870000	6.94792	6.94792	0
24	151651	2	2	2	28	8650000	6.93702	6.93702	0
25	151651	1	3	1	28	7950000	6.90037	6.90037	-8.8818E-16
26	151651	2	3	1	28	7620000	6.88195	6.88195	-7.1054E-15
27	151651	1	3	2	28	5760000	6.76042	6.76042	-8.8818E-16
28	151651	2	3	2	28	5770000	6.76118	6.76118	8.88178E-15
29	1516511	1	0	0	28	1440000	6.15836	6.15836	-8.8818E-16
30	1516511	2	0	0	28	1100000	6.04139	6.04139	-1.7764E-15
31	1516511	1	1	1	28	12400000	7.09342	7.09342	6.83897E-14
32	1516511	2	1	1	28	.	.	.	.
33	1516511	1	1	2	28	12300000	7.08991	7.08991	-7.0166E-14
34	1516511	2	1	2	28	.	.	.	.
35	1516511	1	2	1	28	5380000	6.73078	6.73078	-1.7764E-14
36	1516511	2	2	1	28	.	.	.	.
37	1516511	1	2	2	28	5860000	6.76790	6.76790	1.68754E-14
38	1516511	2	2	2	28	.	.	.	.
39	1516511	1	3	1	28	6320000	6.80072	6.80072	-5.3291E-14

40	1516511	2	3	1	28	.	.	.	.
41	1516511	1	3	2	28	2570000	6.40993	6.40993	5.59552E-14
42	1516511	2	3	2	28	.	.	.	.
43	151652	1	0	0	28	1440000	6.15836	6.15836	-8.8818E-16
44	151652	2	0	0	28	1100000	6.04139	6.04139	-1.7764E-15
45	151652	1	1	1	28	10600000	7.02531	7.02531	0
46	151652	2	1	1	28	.	.	.	.
47	151652	1	1	2	28	22800000	7.35793	7.35793	0
48	151652	2	1	2	28	.	.	.	.
49	151652	1	2	1	28	13500000	7.13033	7.13033	-8.8818E-16
50	151652	2	2	1	28	.	.	.	.

OBS	PROJ	SAMPLE	LOC	TB	TEMP	STIFF	LSTIFF	P	R
51	151652	1	2	2	28	8870000	6.94792	6.94792	-8.8818E-16
52	151652	2	2	2	28	.	.	.	.
53	151652	1	3	1	28	7950000	6.90037	6.90037	8.88178E-16
54	151652	2	3	1	28	.	.	.	.
55	151652	1	3	2	28	5760000	6.76042	6.76042	-1.7764E-15
56	151652	2	3	2	28	.	.	.	.
57	1516521	1	0	0	28	1440000	6.15836	6.15836	-8.8818E-16
58	1516521	2	0	0	28	1100000	6.04139	6.04139	1.5099E-14
59	1516521	1	1	1	28	18100000	7.25768	7.25768	-8.5265E-14
60	1516521	2	1	1	28	.	.	.	.
61	1516521	1	1	2	28	13600000	7.13354	7.13354	9.14824E-14
62	1516521	2	1	2	28	.	.	.	.
63	1516521	1	2	1	28	.	.	.	.
64	1516521	2	2	1	28	.	.	.	.
65	1516521	1	2	2	28	6900000	6.83885	6.83885	7.10543E-15
66	1516521	2	2	2	28	.	.	.	.
67	1516521	1	3	1	28	.	.	.	.
68	1516521	2	3	1	28	.	.	.	.
69	1516521	1	3	2	28	10800000	7.03342	7.03342	-2.3626E-13
70	1516521	2	3	2	28	.	.	.	.
71	15308	1	0	0	28	4560000	6.65896	6.65896	-8.8818E-16
72	15308	2	0	0	28	4170000	6.62014	6.62014	-8.8818E-16
73	15308	1	1	1	28	11500000	7.06070	7.06070	0
74	15308	2	1	1	28	11700000	7.06819	7.06819	-8.8818E-16
75	15308	1	1	2	28	16700000	7.22272	7.22272	0
76	15308	2	1	2	28	16900000	7.22789	7.22789	1.77636E-15

77	15308	1	2	1	28	10400000	7.01703	7.01703	-8.8818E-16
78	15308	2	2	1	28	10600000	7.02531	7.02531	0
79	15308	1	2	2	28	9290000	6.96802	6.96802	0
80	15308	2	2	2	28	9460000	6.97589	6.97589	0
81	15308	1	3	1	28	9810000	6.99167	6.99167	0
82	15308	2	3	1	28	10000000	7.00000	7.00000	-8.8818E-16
83	15308	1	3	2	28	17600000	7.24551	7.24551	-8.8818E-16
84	15308	2	3	2	28	18000000	7.25527	7.25527	-1.954E-14
85	15502	1	0	0	28	1790000	6.25285	6.25285	-8.8818E-16
86	15502	2	0	0	28	1670000	6.22272	6.22272	-1.7764E-15
87	15502	1	1	1	28	6440000	6.80889	6.80889	-8.8818E-16
88	15502	2	1	1	28	7440000	6.87157	6.87157	0
89	15502	1	1	2	28	14900000	7.17319	7.17319	0
90	15502	2	1	2	28	15900000	7.20140	7.20140	0
91	15502	1	2	1	28	4240000	6.62737	6.62737	-8.8818E-16
92	15502	2	2	1	28	4870000	6.68753	6.68753	-8.8818E-16
93	15502	1	2	2	28	6450000	6.80956	6.80956	-8.8818E-16
94	15502	2	2	2	28	7750000	6.88930	6.88930	1.77636E-15
95	15502	1	3	1	28	6970000	6.84323	6.84323	-8.8818E-16
96	15502	2	3	1	28	7870000	6.89597	6.89597	-1.7764E-15
97	15502	1	3	2	28	1310000	6.11727	6.11727	-8.8818E-16
98	15502	2	3	2	28	1680000	6.22531	6.22531	-1.7764E-15
99	154041	1	0	0	28	3600000	6.55630	6.55630	-8.8818E-16
100	154041	2	0	0	28	2900000	6.46240	6.46240	-8.8818E-16

OBS	PROJ	SAMPLE	LOC	TB	TEMP	STIFF	LSTIFF	P	R
101	154041	1	1	1	28	7780000	6.89098	6.89098	0
102	154041	2	1	1	28	8440000	6.92634	6.92634	0
103	154041	1	1	2	28	7320000	6.86451	6.86451	0
104	154041	2	1	2	28	7480000	6.87390	6.87390	-1.7764E-15
105	154041	1	2	1	28	6750000	6.82930	6.82930	-8.8818E-16
106	154041	2	2	1	28	7220000	6.85854	6.85854	0
107	154041	1	2	2	28	6120000	6.78675	6.78675	0
108	154041	2	2	2	28	6840000	6.83506	6.83506	0
109	154041	1	3	1	28	8920000	6.95036	6.95036	-8.8818E-16
110	154041	2	3	1	28	10000000	7.00000	7.00000	-3.5527E-15
111	154041	1	3	2	28	7380000	6.86806	6.86806	-1.7764E-15
112	154041	2	3	2	28	7980000	6.90200	6.90200	8.88178E-15
113	15630	1	0	0	28	2960000	6.47129	6.47129	-8.8818E-16

114	15630	2	0	0	28	2520000	6.40140	6.40140	-1.7764E-15
115	15630	1	1	1	28	6940000	6.84136	6.84136	-8.8818E-16
116	15630	2	1	1	28	7010000	6.84572	6.84572	-1.7764E-15
117	15630	1	1	2	28	2700000	6.43136	6.43136	-8.8818E-16
118	15630	2	1	2	28	2780000	6.44404	6.44404	0
119	15630	1	2	1	28	5250000	6.72016	6.72016	-8.8818E-16
120	15630	2	2	1	28	5410000	6.73320	6.73320	0
121	15630	1	2	2	28	4120000	6.61490	6.61490	-1.7764E-15
122	15630	2	2	2	28	4260000	6.62941	6.62941	0
123	15630	1	3	1	28	3540000	6.54900	6.54900	-8.8818E-16
124	15630	2	3	1	28	3680000	6.56585	6.56585	0
125	15630	1	3	2	28	3350000	6.52504	6.52504	-1.7764E-15
126	15630	2	3	2	28	3480000	6.54158	6.54158	-1.2434E-14
127	15173	1	0	0	28	3040000	6.48287	6.48287	-8.8818E-16
128	15173	2	0	0	28	.	.	.	.
129	15173	1	1	1	28	6940000	6.84136	6.84136	0
130	15173	2	1	1	28	.	.	.	.
131	15173	1	1	2	28	2700000	6.43136	6.43136	0
132	15173	2	1	2	28	.	.	.	.
133	15173	1	2	1	28	5250000	6.72016	6.72016	0
134	15173	2	2	1	28	.	.	.	.
135	15173	1	2	2	28	4120000	6.61490	6.61490	-1.7764E-15
136	15173	2	2	2	28	.	.	.	.
137	15173	1	3	1	28	3540000	6.54900	6.54900	-8.8818E-16
138	15173	2	3	1	28	.	.	.	.
139	15173	1	3	2	28	3350000	6.52504	6.52504	2.66454E-15
140	15173	2	3	2	28	.	.	.	.
141	15174	1	0	0	28	1690000	6.22789	6.22789	-8.8818E-16
142	15174	2	0	0	28	2500000	6.39794	6.39794	-8.8818E-16
143	15174	1	1	1	28	.	.	.	.
144	15174	2	1	1	28	.	.	.	.
145	15174	1	1	2	28	.	.	.	.
146	15174	2	1	2	28	.	.	.	.
147	15174	1	2	1	28	13800000	7.13988	7.13988	-8.8818E-16
148	15174	2	2	1	28	14300000	7.15534	7.15534	-8.8818E-16
149	15174	1	2	2	28	15000000	7.17609	7.17609	-8.8818E-16
150	15174	2	2	2	28	15500000	7.19033	7.19033	8.88178E-16

OBS	PROJ	SAMPLE	LOC	TB	TEMP	STIFF	LSTIFF	P	R

151	15174	1	3	1	28	19200000	7.28330	7.28330	0
152	15174	2	3	1	28	18400000	7.26482	7.26482	-8.8818E-16
153	15174	1	3	2	28	17400000	7.24055	7.24055	0
154	15174	2	3	2	28	17800000	7.25042	7.25042	1.77636E-15
155	15309	1	0	0	28	1340000	6.12710	6.12710	-8.8818E-16
156	15309	2	0	0	28	1440000	6.15836	6.15836	-8.8818E-16
157	15309	1	1	1	28	6930000	6.84073	6.84073	0
158	15309	2	1	1	28	.	.	.	.
159	15309	1	1	2	28	2700000	6.43136	6.43136	-8.8818E-16
160	15309	2	1	2	28	.	.	.	.
161	15309	1	2	1	28	5250000	6.72016	6.72016	0
162	15309	2	2	1	28	.	.	.	.
163	15309	1	2	2	28	4120000	6.61490	6.61490	-8.8818E-16
164	15309	2	2	2	28	.	.	.	.
165	15309	1	3	1	28	3540000	6.54900	6.54900	-2.6645E-15
166	15309	2	3	1	28	.	.	.	.
167	15309	1	3	2	28	3350000	6.52504	6.52504	4.44089E-15
168	15309	2	3	2	28	.	.	.	.
169	15617	1	0	0	28	2150000	6.33244	6.33244	-8.8818E-16
170	15617	2	0	0	28	1790000	6.25285	6.25285	0
171	15617	1	1	1	28	2160000	6.33445	6.33445	0
172	15617	2	1	1	28	.	.	.	.
173	15617	1	1	2	28	6630000	6.82151	6.82151	-8.8818E-16
174	15617	2	1	2	28	.	.	.	.
175	15617	1	2	1	28	2420000	6.38382	6.38382	-8.8818E-16
176	15617	2	2	1	28	.	.	.	.
177	15617	1	2	2	28	5020000	6.70070	6.70070	0
178	15617	2	2	2	28	.	.	.	.
179	15617	1	3	1	28	3540000	6.54900	6.54900	0
180	15617	2	3	1	28	.	.	.	.
181	15617	1	3	2	28	743000	5.87099	5.87099	5.32907E-15
182	15617	2	3	2	28	.	.	.	.

APPENDIX D

Storage Time Effect on Stiffness of Extracted and Recovered Asphalts

Table D-1 Stiffnesses of the Asphalts from 1996 construction season

Temp	RTFO-96 (P21687)	Mix-96 (P21687)
40	1.62E+04	2.00E+04
46	8.24E+03	1.05E+04
52	4.79E+03	5.72E+03
58	2.60E+03	3.20E+03
64	1.59E+03	1.89E+03
70	9.47E+02	1.12E+03
76	5.70E+02	6.70E+02
80	3.92E+02	4.73E+02
40	2.05E+04	2.01E+04
46	1.05E+04	1.06E+04
52	5.67E+03	5.72E+03
58	3.24E+03	3.24E+03
64	1.90E+03	1.90E+03
70	1.13E+03	1.13E+03
76	6.83E+02	6.89E+02
80	4.90E+02	5.01E+02
Temp	RTFO-96 (P22350)	Mix-96 (P22350)
40	2.86E+04	3.52E+04
46	1.36E+04	1.70E+04
52	6.37E+03	8.06E+03
58	2.85E+03	3.68E+03
64	1.45E+03	1.78E+03
70	7.39E+02	9.21E+02
76	3.74E+02	4.77E+02
80	2.63E+02	3.08E+02
40	2.64E+04	3.40E+04
46	1.29E+04	1.65E+04
52	6.02E+03	7.74E+03
58	2.81E+03	3.61E+03
64	1.42E+03	1.76E+03
70	6.95E+02	8.55E+02
76	3.63E+02	4.52E+02
80	2.57E+02	2.94E+02

Table D-2 Difference in Means analysis Between RTFO and Cores taken Just after Construction in 1996.

t-Test: Paired Two Sample for Means		
	RTFO-96	*Mix-96*
Mean	5768.017037	6880.191205
Variance	59471084.93	88054781.7
Observations	32	32
Pearson Correlation	0.9934803	
Hypothesized Mean Difference	0	
Df	31	
t Stat	-3.25356338	
P(T<=t) one-tail	0.001376204	
t Critical one-tail	1.695518677	
P(T<=t) two-tail	0.002752409	
t Critical two-tail	2.039514584	

Table D-3 Difference in Means analysis at 64C.

t-Test: Paired Two Sample for Means		
	RTFO-96 @ 64C	*Mix-96 @64C*
Mean	1589.90231	1835.103092
Variance	48350.6717	5036.711662
Observations	4	4
Pearson Correlation	0.843804596	
Hypothesized Mean Difference	0	
df	3	
t Stat	-2.98164259	
P(T<=t) one-tail	0.029260048	
t Critical one-tail	2.353363016	
P(T<=t) two-tail	0.058520097	
t Critical two-tail	3.182449291	

Table D-4 Summary of RTFO and MIX data from 1985 and 1996 Paving Seasons.

Temp	Neat 1996	Mixes 1996	Neat 1985	mixes 1985
64	1.59E+03	1.84E+03	3.83E+03	12132.1

Table D-5 Summary of RTFO and Mix Asphalts Data from 1996 Construction. Season

	58C	64C	70C	76C
RTFO - 96	2.87E+03	1.59E+03	8.78E+02	4.98E+02
MIX - 96	3.44E+03	1.84E+03	1.01E+03	5.72E+02

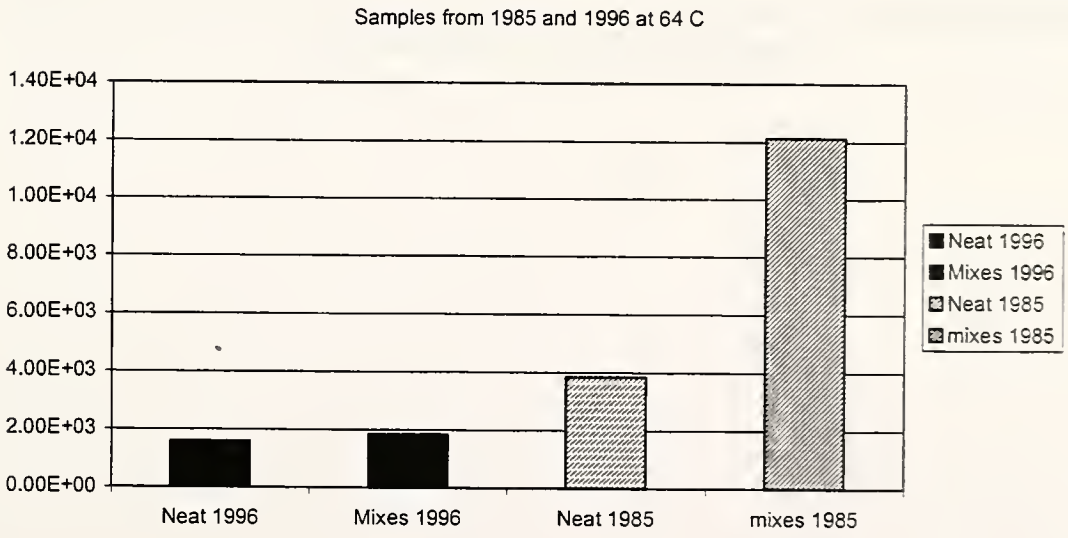

Figure D-1 RTFO and MIX asphalts from 1985 and 1996 Paving Seasons.

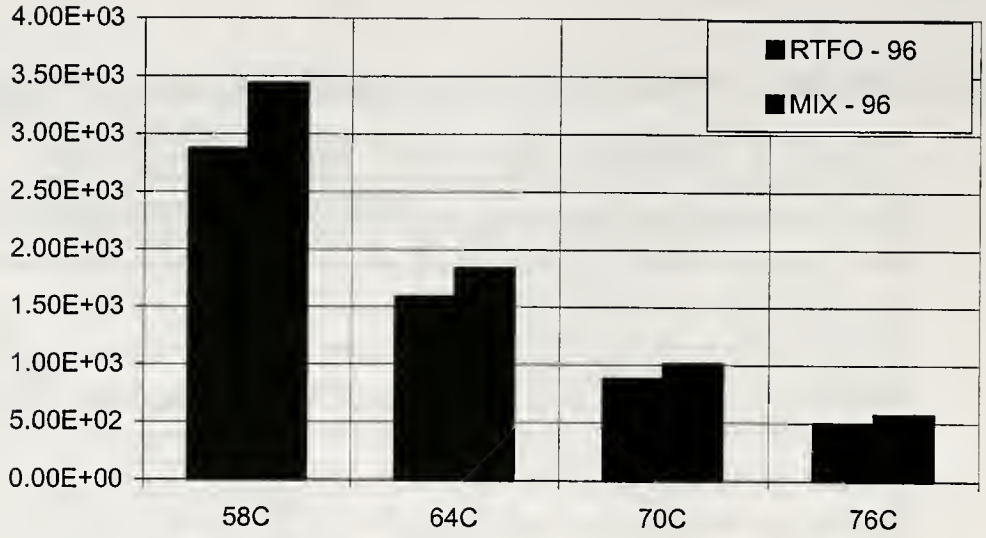

Figure D-2 RTFO and MIX asphalts from 1996 Paving Seasons.

APPENDIX E

Effect of Solvent Extraction and Recovery on the Stiffnesses of Asphalts Extracted and Recovered from Field Samples

Table E-1 Stiffness of the Extracted and Recovered Asphalts Using TCE and TOL.

Extracted and Recovered Asphalt using TCE from Two Projects				
TEMP. C	**p15165b1tce**	**p15165b2tce**	**p15165a1tce**	**p15165a2tce**
40	4.68898E+05	4.63360E+05	5.68282E+05	3.83287E+05
46	2.14723E+05	2.27332E+05	2.82886E+05	2.35642E+05
52	9.63300E+04	1.01943E+05	1.29596E+05	1.05820E+05
58	4.37557E+04	4.56869E+04	5.92712E+04	4.73820E+04
64	1.99741E+04	2.05251E+04	2.73603E+04	2.14238E+04
70	9.22266E+03	9.40068E+03	1.26955E+04	9.79026E+03
76	4.37840E+03	4.41436E+03	6.00304E+03	4.62506E+03
80	2.72725E+03	2.73934E+03	3.70320E+03	2.86659E+03

Extracted and Recovered Asphalt using TOL from Two Projects				
TEMP. C	**p15165b1tol**	**p15165b2tol**	**p15165a1tol**	**p15165a2tol**
40	4.25176E+05	4.29078E+05	4.29447E+05	4.35897E+05
46	1.93504E+05	1.92651E+05	1.95702E+05	2.06215E+05
52	8.53519E+04	8.45144E+04	8.67199E+04	9.06769E+04
58	3.78400E+04	3.70862E+04	3.85275E+04	4.02584E+04
64	1.71127E+04	1.66296E+04	1.74258E+04	1.79854E+04
70	7.84944E+03	7.52522E+03	7.97573E+03	8.14926E+03
76	3.70472E+03	3.53022E+03	3.76269E+03	3.84992E+03
80	2.31600E+03	2.18246E+03	2.32763E+03	2.39601E+03

Table E-2 Difference in Means Analysis Between TOL and TCE Samples for the Two Projects.

t-Test: Paired Two Sample for Means		
	TOL	*TCE*
Mean	97917.7422	113626.31
Variance	2.0177E+10	2.531E+10
Observations	32	32
Pearson Correlation	0.98458298	
Hypothesized Mean Diff.	0	
df	31	
t Stat	-2.82791724	
P(T<=t) one-tail	0.0040689	
t Critical one-tail	1.69551868	
P(T<=t) two-tail	0.00813779	
t Critical two-tail	2.03951458	

Table E-3 Difference in Means Analysis Between TOL and TCE Samples for Project 15165b1.

t-Test: Paired Two Sample for Means		
	TOL	*TCE*
Mean	96628.24225	108463.0892
Variance	20533821695	24589726803
Observations	16	16
Pearson Correlation	0.999521237	
Hypothesized Mean Diff.	0	
df	15	
t Stat	-3.31306369	
P(T<=t) one-tail	0.002365237	
t Critical one-tail	1.753051038	
P(T<=t) two-tail	0.004730475	
t Critical two-tail	2.131450856	

Table E-4 Difference in Means Analysis Between TOL and TCE Samples for Project 15165a1.

t-Test: Paired Two Sample for Means		
	Variable 1	*Variable 2*
Mean	99207.24206	118789.5303
Variance	21161761536	27661620028
Observations	16	16
Pearson Correlation	0.971691082	
Hypothesized Mean Diff.	0	
df	15	
t Stat	-1.84396732	
P(T<=t) one-tail	0.042515488	
t Critical one-tail	1.753051038	
P(T<=t) two-tail	0.085030977	
t Critical two-tail	2.131450856	

Table E-5 Difference in Means Analysis Between TOL and TCE Samples for Project 15165a1 and 15165b1 at 64C.

15165a t-Test: Paired Two Sample for Means

	Variable 1	*Variable 2*
Mean	24392.055	17705.625
Variance	17620956.8	156581.676
Observations	2	2
Pearson Correlation	-1	
Hypothesized Mean Differer	0	
df	1	
t Stat	2.05859824	
P(T<=t) one-tail	0.14393873	
t Critical one-tail	6.3137486	
P(T<=t) two-tail	0.28787747	
t Critical two-tail	12.7061503	

15165b t-Test: Paired Two Sample for Means

	TCE@64	*TOL@64*
Mean	20249.6	16871.16
Variance	151844.5832	116692.805
Observations	2	2
Pearson Correlation	-1	
Hypothesized Mean Differer	0	
df	1	
t Stat	6.533562823	
P(T<=t) one-tail	0.048344016	
t Critical one-tail	6.313748599	
P(T<=t) two-tail	0.096688031	
t Critical two-tail	12.7061503	

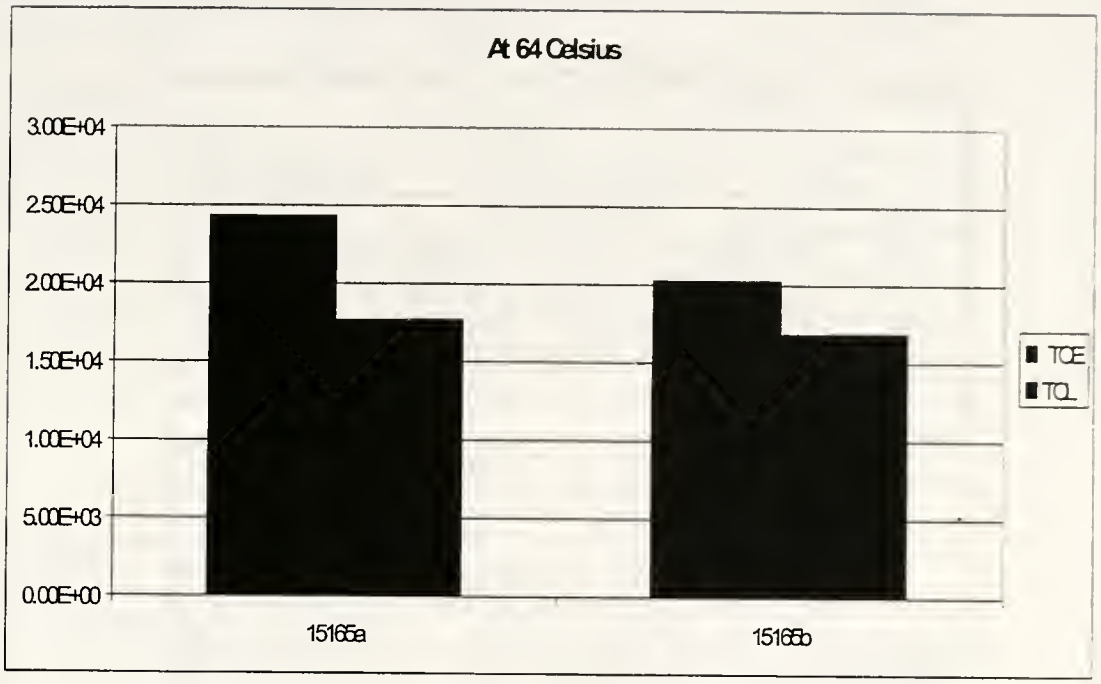

Figure E-1 Stiffnesses of the Extracted and Recovered Asphalts uing TCE and TOL at 64.

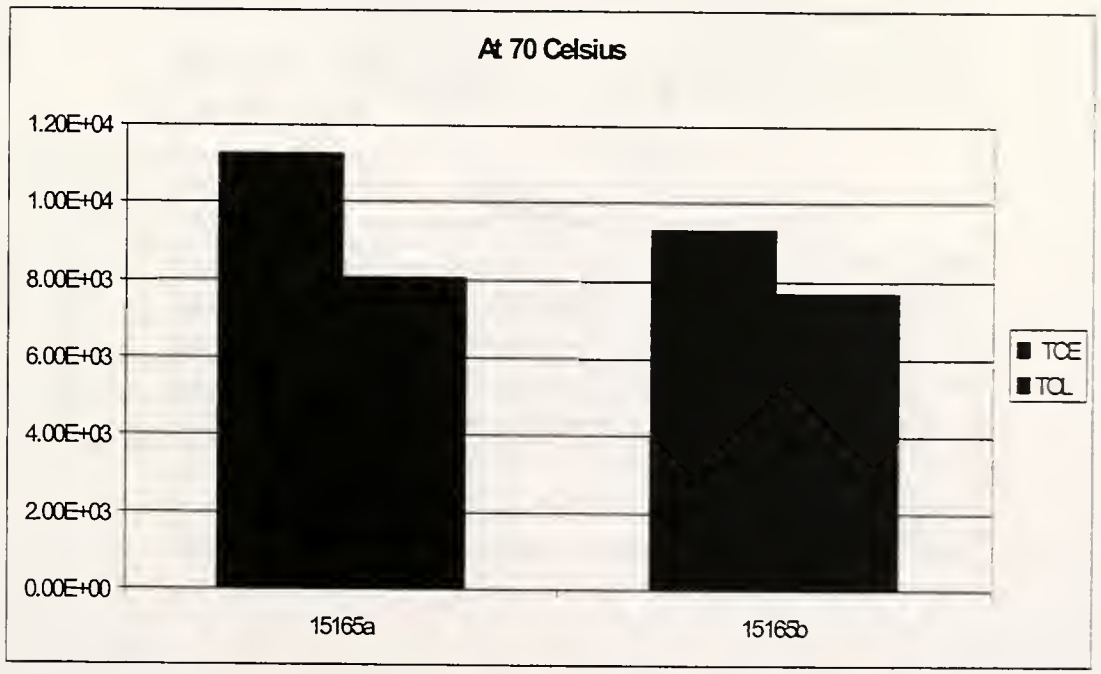

Figure E-2 Stiffnesses of the Extracted and Recovered Asphalts uing TCE and TOL at 70C.

Table E-6 Stiffnesses of the In-service asphalts of Project 15165a1 Using TCE and TOL.

15165a1	TCE			
	OWP			
	Top		Bottom	
Temp.	1	2	1	2
16	4.71E+07	-	4.81E+07	-
19	3.44E+07	-	3.51E+07	-
22	2.49E+07	-	2.51E+07	-
25	1.78E+07	-	1.78E+07	-
28	1.24E+07	-	1.23E+07	-
31	8.59E+06	-	8.34E+06	-
	IWP			
	Top		Bottom	
Temp.	1	2	1	2
16	2.58E+07	-	1.11E+07	-
19	1.85E+07	-	7.79E+06	-
22	1.31E+07	-	5.39E+06	-
25	9.22E+06	-	3.71E+06	-
28	6.32E+06	-	2.57E+06	-
31	4.24E+06	-	1.76E+06	-
	BWP			
	Top		Bottom	
Temp.	1	2	1	2
16	1.53E+06	-	2.42E+07	-
19	4.22E+06	-	1.74E+07	-
22	7.86E+06	-	1.24E+07	-
25	6.85E+06	-	8.59E+06	-
28	5.38E+06	-	5.86E+06	-
31	4.13E+06	-	3.92E+06	-

15615a1	TOL			
	OWP			
	Top		Bottom	
Temp.	1	2	1	2
16	3.99E+07	-	2.86E+07	-
19	3.01E+07	-	2.03E+07	-
22	2.22E+07	-	1.41E+07	-
25	1.62E+07	-	9.57E+06	-
28	1.16E+07	-	6.46E+06	-
31	8.13E+06	-	4.25E+06	-

	BWP			
	Top		Bottom	
Temp.	1	2	1	2
16	2.66E+07	-	2.76E+07	-
19	1.93E+07	-	2.01E+07	-
22	1.39E+07	-	1.44E+07	-
25	9.90E+06	-	1.02E+07	-
28	6.86E+06	-	7.07E+06	-
31	4.70E+06	-	4.83E+06	-

	IWP			
	Top		Bottom	
Temp.	1	2	1	2
16	1.55E+07	-	2.28E+07	-
19	1.87E+07	-	1.60E+07	-
22	1.33E+07	-	1.11E+07	-
25	9.30E+06	-	7.59E+06	-
28	6.36E+06	-	5.13E+06	-
31	4.27E+06	-	3.42E+06	-

Table E-6 Stiffnesses of the In-service asphalts of Project 15165b1 Using TCE and TOL.

15165b1	TCE			
	OWP			
	Top		Bottom	
Temp.	1	2	1	2
16	6.79E+07	-	5.37E+07	-
19	5.03E+07	-	3.97E+07	-
22	3.65E+07	-	2.82E+07	-
25	2.60E+07	-	1.97E+07	-
28	1.81E+07	-	1.36E+07	-
31	1.25E+07	-	9.13E+06	-
	BWP			
	Top		Bottom	
Temp.	1	2	1	2
16	-	-	2.75E+07	-
19	-	-	2.00E+07	-
22	-	-	1.45E+07	-
25	-	-	1.00E+07	-
28	-	-	6.90E+06	-
31	-	-	4.59E+06	-
	IWP			
	Top		Bottom	
Temp.	1	2	1	2
16	-	-	4.60E+07	-
19	-	-	3.30E+07	-
22	-	-	2.30E+07	-
25	-	-	1.60E+07	-
28	-	-	1.08E+07	-
31	-	-	7.17E+06	-

15165b1	TOL			
	OWP			
	Top		Bottom	
Temp.	1	2	1	2
16	-	-	1.40E+33	-
19	-	-	4.18E+33	-
22	-	-	4.73E+33	-
25	-	-	3.93E+33	-
28	-	-	3.00E+33	-
31	-	-	2.15E+33	-

	IWP			
	Top		Bottom	
Temp.	1	2	1	2
16	4.10E+07	-	3.81E+07	-
19	3.91E+07	-	2.60E+07	-
22	3.07E+07	-	1.80E+07	-
25	2.21E+07	-	1.21E+07	-
28	1.55E+07	-	8.17E+06	-
31	1.06E+07	-	5.34E+06	-

	BWP			
	Top		Bottom	
Temp.	1	2	1	2
16	4.57E+07	3.85E+07	3.41E+07	-
19	3.38E+07	3.03E+07	2.47E+07	-
22	2.47E+07	2.28E+07	1.75E+07	-
25	1.77E+07	1.66E+07	1.22E+07	-
28	1.25E+07	1.18E+07	8.31E+06	-
31	8.68E+06	8.44E+06	5.63E+06	-

Table E-7 Difference in Means Analysis for Project 15165a1.

Temp.	TCE	TOL
OWP-T	1.78E+07	1.62E+07
OWP-B	1.78E+07	9.57E+06
IWP-T	9.22E+06	9.90E+06
IWP-B	3.71E+06	1.02E+07
BWP-T	6.85E+06	9.30E+06
BWP-B	8.59E+06	7.59E+06

t-Test: Paired Two Sample for Means
alpha = 0.05

	TCE@25	*TOL@25*
Mean	10647225	10456748.5
Variance	3.397E+13	8.7362E+12
Observations	6	6
Pearson Correlation	0.5507034	
Hypothesized Mean Diff.	0	
df	5	
t Stat	0.0957756	
P(T<=t) one-tail	0.4637095	
t Critical one-tail	2.0150492	
P(T<=t) two-tail	0.927419	
t Critical two-tail	2.5705776	

Temp.	TCE	TOL
OWP-T	1.78E+07	1.62E+07
OWP-B	1.78E+07	9.57E+06
IWP-T	9.22E+06	9.90E+06
IWP-B	3.71E+06	1.02E+07
BWP-T	6.85E+06	9.30E+06
BWP-B	8.59E+06	7.59E+06

t-Test: Paired Two Sample for Means
alpha = 0.02

	TCE@25	*TOL@25*
Mean	10647225	10456749
Variance	3.4E+13	8.74E+12
Observations	6	6
Pearson Correlation	0.550703	
Hypothesized Mean Diff.	0	
df	5	
t Stat	0.095776	
P(T<=t) one-tail	0.463709	
t Critical one-tail	2.756515	
P(T<=t) two-tail	0.927419	
t Critical two-tail	3.36493	

Table E-8 Difference in Means Analysis for Project 15165b1.

TCE@25	TOL@25
1.00E+07	1.21E+07
1.60E+07	1.22E+07

t-Test: Paired Two Sample for Means
alpha - 0.05

	TCE@25	*TOL@25*
Mean	13005814	12150000
Variance	1.79E+13	5E+09
Observations	2	2
Pearson Correlation	1	
Hypothesized Mean Difference	0	
df	1	
t Stat	0.290942	
P(T<=t) one-tail	0.409878	
t Critical one-tail	6.313749	
P(T<=t) two-tail	0.819756	
t Critical two-tail	12.70615	

TCE@25	TOL@25
1.00E+07	1.21E+07
1.60E+07	1.22E+07

t-Test: Paired Two Sample for Means
alpha =0.02

	TCE@25	*TOL@25*
Mean	1.3E+07	1.2E+07
Variance	1.8E+13	5E+09
Observations	2	2
Pearson Correlation	1	
Hypothesized Mean Difference	0	
df	1	
t Stat	0.29094	
P(T<=t) one-tail	0.40988	
t Critical one-tail	15.8945	
P(T<=t) two-tail	0.81976	
t Critical two-tail	31.821	

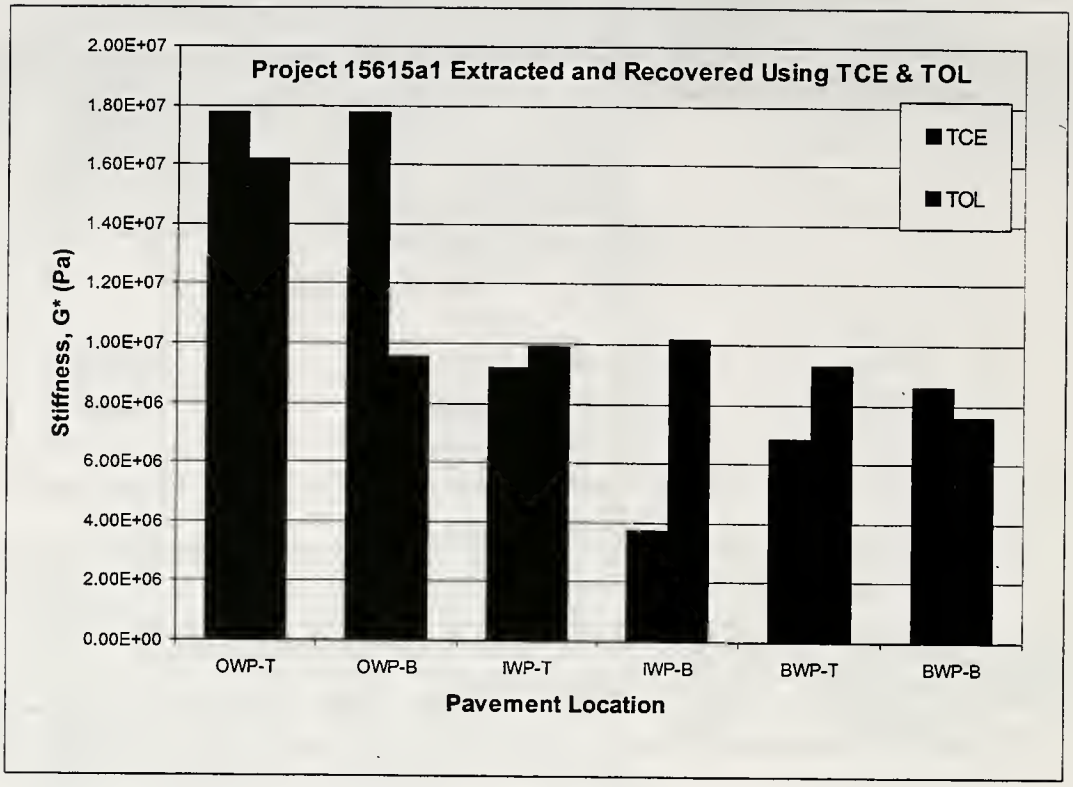

Figure E-3 Stiffnesses of the Extracted and Recovered Asphalts Using TCE and TOL from the In-service Cores for Project 15165a1.

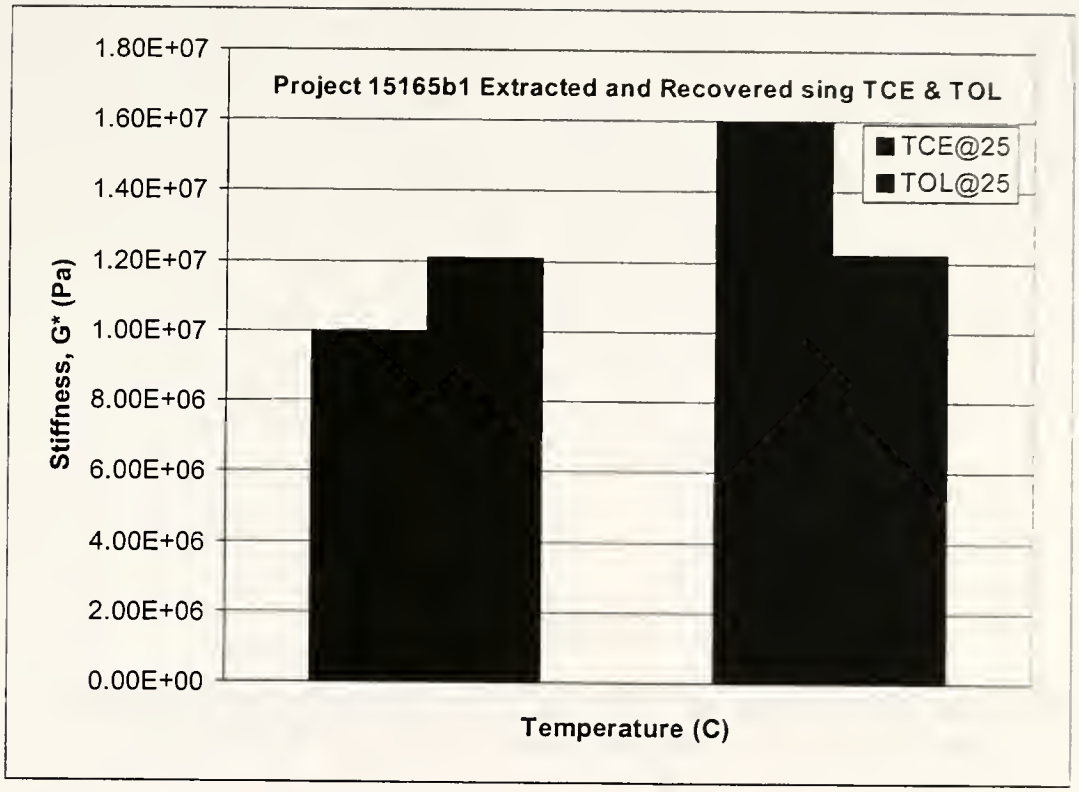

Figure E-4 Stiffnesses of the Extracted and Recovered Asphalts Using TCE and TOL from the In-service Cores for Project 15165b1.

APPENDIX F

Summary of the Collected Weather Data, SHRP Recommended PG grades, and projects locations/Weather stations locations included in this study.

Table F-1 Computed High and Minimum Air Temperatures of English City Weather Station located in Crawford County

English	7 Day Average		
	Maximum	St. Dev.	Minimum
1985	93.14285714	0.899735411	-19
1986	95.42857143	0.786795792	-4
1987	96.71428571	1.603567451	-2
1988	100.2857143	1.253566341	-9
1989	91.85714286	0.690065559	-21
1990	95.28571429	1.253566341	1
1991	97.14285714	1.463850109	-2
1992	92.85714286	1.463850109	-2
1993	94.57142857	0.786795792	-4
AVG.	95.25396825		-6.888888889
ST. DEV.	2.580121989		7.912718314

Table F-2 Computed High and Minimum Reliability Levels for English City Weather Station Located in Crawford County

ENGLISH		
	High	Low
1985	33.96825397	-28.33333333
1986	35.23809524	-20
1987	35.95238095	-18.88888889
1988	37.93650794	-22.77777778
1989	33.25396825	-29.44444444
1990	35.15873016	-17.22222222
1991	36.19047619	-18.88888889
1992	33.80952381	-18.88888889
1993	34.76190476	-20
AVG.	35.14109347	-21.60493827
ST. DEV.	1.433401105	4.395954619
0.995	38.83329751	-32.9281899
0.98	38.08493838	-30.63312205
0.95	37.49882758	-28.83563742
0.9	36.9780698	-27.23857741
0.85	36.62671751	-26.16105017
0.8	36.3474745	-25.30466769
0.5	35.14109347	-21.60493827
98%	64	-34
50%	58	22

Table F-3 Computed High and Minimum Air Temperatures of Martinsville City Weather Station Located in Morgan County

Martinsville	7 Day Average		
	Maximum	St. Dev.	Minimum
1985	90.14285714	0.899735411	-21
1986	95.28571429	1.380131119	0
1987	92.57142857	1.133893419	-7
1988	100	0.577350269	-4
1989	90.71428571	0.755928946	-22
1990	91.28571429	1.253566341	-2
1991	93.57142857	0.975900073	-3
1992	87.42857143	0.975900073	-7
1993	91.85714286	1.069044968	-11
	92.53968254		-8.555555556
	3.561971606		8.017342314

Table F-4 Computed High and Minimum Reliability Levels for Martinsville City Weather Station Located in Morgan County

Martinsville		
	Maximum	Minumum
1985	32.3015873	-29.44444444
1986	35.15873016	-17.77777778
1987	33.65079365	-21.66666667
1988	37.77777778	-20
1989	32.61904762	-30
1990	32.93650794	-18.88888889
1991	34.20634921	-19.44444444
1992	30.79365079	-21.66666667
1993	33.25396825	-23.88888889
Average	33.63315697	-22.5308642
St. Dev.	1.978873115	4.454079063
0.995	38.73040663	-34.00383478
0.98	37.69726402	-31.67842095
0.95	36.88811235	-29.85716951
0.9	36.16918338	-28.23899276
0.85	35.68412612	-27.14721818
0.8	35.2986189	-26.27951239
0.7	34.67088001	-24.86658772
0.6	34.13449768	-23.65928985
0.5	33.63315697	-22.5308642
98%	58	-34
50%	58	-28

Table F-5 Computed High and Minimum Air Temperatures of Perrysville City Weather Station Located in Fountain County

Perrysville	7 Day Average		
	Maximum		Minimum
1985	91.28571429	1.112697281	-26
1986	94.14285714	0.690065559	-6
1987	94.42857143	0.786795792	-11
1988	102.7142857	1.380131119	-13
1989	94.28571429	1.704336206	-23
1990	95.42857143	1.133893419	-7
1991	97	1.527525232	-3
1992	91	2.449489743	-7
1993	92.57142857	0.534522484	-7
AVG	94.76190476		-11.44444444
SD	3.54346193		7.970431467

Table F-6 Computed High and Minimum Reliability Levels for Perrysville City Weather Station Located in Fountain County

PERRYSVILLE		
	MAX	MIN
1985	32.93650794	-32.22222222
1986	34.52380952	-21.11111111
1987	34.68253968	-23.88888889
1988	39.28571429	-25
1989	34.6031746	-30.55555556
1990	35.23809524	-21.66666667
1991	36.11111111	-19.44444444
1992	32.77777778	-21.66666667
1993	33.65079365	-21.66666667
AVG	34.86772487	-24.13580247
SD	1.968589961	4.428017482
0.995	39.93848683	-35.54164273
0.98	38.91071291	-33.2298353
0.95	38.10576597	-31.41924031
0.9	37.3905729	-29.81053179
0.85	36.90803623	-28.72514537
0.8	36.52453228	-27.86251668
0.7	35.90005542	-26.45785928
0.5	34.86772487	-24.13580247
98%	64	-34
50%	58	-28

Table F-7 Computed High and Minimum Air Temperatures of Richmond City Weather Station Located in Wayne County

Richmond	7 Day Average		
	Maximum		Minimum
1985	90.85714286	1.214985793	-25
1986	93	0.577350269	-2
1987	88.57142857	0.975900073	-3
1988	98.85714286	1.069044968	-6
1989	91.85714286	1.573591585	-22
1990	92.57142857	1.511857892	1
1991	94.14285714	1.069044968	1
1992	88.42857143	1.397276262	-8
1993	91.71428571	1.112697281	-9
AVG	92.22222222		-8.111111111
SD	3.130748681		9.439868172

Table F-8 Computed High and Minimum Reliability Levels for Richmond City Weather Station Located in Wayne County

RICHMOND		
1985	32.6984127	-31.66666667
1986	33.88888889	-18.88888889
1987	31.42857143	-19.44444444
1988	37.14285714	-21.11111111
1989	33.25396825	-30
1990	33.65079365	-17.22222222
1991	34.52380952	-17.22222222
1992	31.34920635	-22.22222222
1993	33.17460317	-22.77777778
AVG	33.45679012	-22.28395062
SD	1.739304823	5.244371207
0.995	37.93695152	-35.79258298
0.98	37.02888423	-33.05456842
0.95	36.31769088	-30.91017033
0.9	35.6857976	-29.0048787
0.85	35.25946283	-27.71938936
0.8	34.92062626	-26.69772558
0.7	34.36888332	-25.03410414
0.6	33.89743704	-23.61259408
0.5	33.45679012	-22.28395062
98%	58	-34
50%	58	-28

Table F-9 Computed High and Minimum Air Temperatures of Rushville City Weather Station Located in Rush County

Rushville	7 Day Average		
	Maximum		Minimum
1985	90.28571429	1.112697281	-24
1986	92.14285714	0.377964473	0
1987	91	0.577350269	-4
1988	99.71428571	0.487950036	-5
1989	91.71428571	0.951189731	-23
1990	91.71428571	1.799470822	1
1991	93.14285714	1.214985793	0
1992	87.85714286	1.214985793	-7
1993	90.85714286	0.690065559	-8
AVG	92.04761905		-7.777777778
SD	3.228539823		9.457507306

Table F-10 Computed High and Minimum Reliability Levels for Rushville City Weather Station Located in Rush County

RUSHVILLE		
	MAX	MIN
1985	32.38095238	-31.11111111
1986	33.41269841	-17.77777778
1987	32.77777778	-20
1988	37.61904762	-20.55555556
1989	33.17460317	-30.55555556
1990	33.17460317	-17.22222222
1991	33.96825397	-17.77777778
1992	31.03174603	-21.66666667
1993	32.6984127	-22.22222222
AVG	33.35978836	-22.09876543
SD	1.793633235	5.254170726
0.995	37.97989075	-35.63263973
0.98	37.04345934	-32.88950898
0.95	36.31005137	-30.74110392
0.9	35.65842046	-28.8322521
0.85	35.21876881	-27.54436072
0.8	34.86934845	-26.52078788
0.7	34.30037143	-24.85405783
0.6	33.81419919	-23.42989157
0.5	33.35978836	-22.09876543
98%	58	-34
50%	58	-28

Table F-11 Computed High and Minimum Air Temperatures of Shelbyville City Weather Station Located in Shelby County

Shelbyville	7 Day Average		
	Maximum		Minimum
1985	90.71428571	0.487950036	-22
1986	93.85714286	0.899735411	9
1987	90.42857143	0.786795792	17
1988	100.4285714	0.786795792	-4
1989	92.14285714	0.899735411	-22
1990	94	2.380476143	1
1991	94.57142857	1.133893419	1
1992	88.42857143	0.786795792	-6
1993	91.57142857	1.272418021	-8
AVG	92.9047619		-3.777777778
SD	3.442679308		12.88194257

Table F-12 Computed High and Minimum Reliability Levels for Shelbyville City Weather Station in Shelby County

SHELBYVILLE		
	MAX	MIN
1985	32.61904762	-30
1986	34.36507937	-12.77777778
1987	32.46031746	-8.333333333
1988	38.01587302	-20
1989	33.41269841	-30
1990	34.44444444	-17.22222222
1991	34.76190476	-17.22222222
1992	31.34920635	-21.11111111
1993	33.0952381	-22.22222222
AVG	33.83597884	-19.87654321
SD	1.912599615	7.156634763
0.995	38.76251894	-38.31085004
0.98	37.76397681	-34.5744688
0.95	36.98192405	-31.64815537
0.9	36.28707239	-29.04813417
0.85	35.81825996	-27.29391477
0.8	35.44566358	-25.89972008
0.7	34.83894799	-23.62948965
0.6	34.32052939	-21.68965208
0.5	33.83597884	-19.87654321
98%	58	-40
50%	58	-22

Table F-13 Computed High and Minimum Air Temperatures for Vincennes City Weather Station Located in Knox County

Vincennes	7 Day Average		
	Maximum		Minimum
1985	92.57142857	1.133893419	-19
1986	95.42857143	0.534522484	-1
1987	95.57142857	1.511857892	0
1988	102.1428571	1.069044968	-2
1989	94.28571429	0.755928946	-21
1990	96.57142857	1.397276262	2
1991	97.85714286	1.214985793	4
1992	91.71428571	0.755928946	0
1993	94.71428571	0.755928946	-5
AVG	95.65079365		-4.666666667
SD	3.07484122		9.055385138

Table F-14 Computed High and Minimum Reliability Levels for Vinecennes City Weather Station Located in Knox County

VINCENNES		
	MAX	MIN
1985	33.65079365	-28.33333333
1986	35.23809524	-18.33333333
1987	35.31746032	-17.77777778
1988	38.96825397	-18.88888889
1989	34.6031746	-29.44444444
1990	35.87301587	-16.66666667
1991	36.58730159	-15.55555556
1992	33.17460317	-17.77777778
1993	34.84126984	-20.55555556
AVG	35.36155203	-20.37037037
SD	1.708245122	5.030769521
0.995	39.76170877	-33.32880014
0.98	38.86985733	-30.7023041
0.95	38.17136414	-28.64524671
0.85	37.13203344	-25.5844253
0.8	36.79924766	-24.60437359
0.75	36.51374691	-23.76357594
0.7	36.25735748	-23.00851095
0.6	35.79433007	-21.64489857
0.5	35.36155203	-20.37037037
98%	64	-34
50%	58	-22

Table F – 15 County locations and nearest weather station for projects tested (after SHRP-A-648A)

ST	county ID	project no.	station
IN	Morgan	15502	Martinsville 2 sw
IN	Crawford	15630	English
IN	Shelby	15165 & 15308	Shelbyville Sewage Plt
IN	Tippecanoe	15619	West Lafayette
IN	Knox	15174	Edwardsport Power Plant
IN	Dubois	15173	Dubois s Ind Forage Frm
IN	Wayne	14643	Cambrige City
IN	Johnson	15404	Franklin 2 Nine
IN	Rush	15309	Rushville Sewage Plant

Table F – 16 Longitude, latitude and elevation – low and high temperatures for projects tested (after SHRP-A-648A)

						air temp			
						low		high	
ST	county ID	project no.	long	lat	elev	avg	std	avg	std
IN	Morgan	15502	86.45	39.4	186	-23	4	33	2
IN	Crawford	15630	86.47	38.28	156	-23	7	33	2
IN	Shelby	15165 & 15308	85.78	39.52	229	-22	5	33	2
IN	Tippecanoe	15619	86.93	40.42	183	-24	3	33	2
IN	Knox	15174	87.23	38.8	140	-21	4	34	2
IN	Dubois	15173	86.7	38.45	210	-22	4	33	2
IN	Wayne	14643	85.17	39.82	290	-24	4	32	2
IN	Johnson	15404	86.07	39.52	235	-21	4	33	2
IN	Rush	15309	85.45	39.6	293	-23	4	33	2

Table F – 17 50% reliability level recommended by SHRP for projects tested (after SHRP-A-648A)

			50%reliability						
			Temperatures				Binder Grade		
ST	county ID	project no.	max air	max pvt	min air	min pvt	PG	HT	L
IN	Morgan	15502	33	53	-23	-23	PG	58	-2
IN	Crawford	15630	33	54	-23	-23	PG	58	-2
IN	Shelby	15165 & 15308	33	53	-22	-22	PG	58	-2
IN	Tippecanoe	15619	33	53	-24	-24	PG	58	-2
IN	Knox	15174	34	55	-21	-21	PG	58	-2
IN	Dubois	15173	33	54	-22	-22	PG	58	-2
IN	Wayne	14643	32	52	-24	-24	PG	58	-2
IN	Johnson	15404	33	53	-21	-21	PG	58	-2
IN	Rush	15309	33	53	-23	-23	PG	58	-2

Table F – 18 98% reliability level recommended by SHRP for projects tested (after SHRP-A-648A)

			98%reliability						
			Temperatures				Binder Grade		
ST	county ID	project no.	max air	max pvt	min air	min pvt	PG	HT	LT
IN	Morgan	15502	37	57	-31	-31	PG	58	-34
IN	Crawford	15630	37	58	-37	-37	PG	58	-40
IN	Shelby	15165 & 15308	37	57	-32	-32	PG	58	-34
IN	Tippecanoe	15619	37	57	-30	-30	PG	58	-34
IN	Knox	15174	38	58	-29	-29	PG	64	-34
IN	Dubois	15173	37	57	-30	-30	PG	58	-34
IN	Wayne	14643	36	56	-32	-32	PG	58	-34
IN	Johnson	15404	37	57	-29	-29	PG	58	-34
IN	Rush	15309	37	57	-31	-31	PG	58	-34

APPENDIX G

Rutting Deduct Values and Cracking Deduct Values and Distress Survey Data

Table G-1 Detect Values for Project 14643

R14643-A Cracking	R14643-A Rutting
16.0	0
36.5	0
17.5	0
22.5	0
15.0	0
26.0	0
21.0	0
17.0	0
22.0	0
24.0	0
9.0	0
27.0	0
20.5	0
33.0	0
26.0	41.5
32.0	0
50.5	1.5
16.0	41.5
16.0	0
33.0	0
24.0	4.2

R14643-B Cracking	R14643-B Rutting
36.0	0
35.5	0
28.0	0
14.0	0
24.5	0
32.5	0
66.0	0
32.0	0
34.5	0
27.0	0
37.5	0
43.0	0
40.5	0
34.7	0.0

Table G-2 Detect Values for Project 15165

a

RS15165-A Cracking	RS15165-A Rutting
31	0
56	0
38	0
42	0
40	0
40	0
42.5	0
41.3571	0

a2

RS15165-A Cracking	RS15165-A Rutting
19	0
16.5	0
44.5	0
33	0
34	0
37	0
35	0
46.5	0
34.5	0
32	0
33.2	0

b

RS15165-B Cracking	RS15165-B Rutting
42	0
41	0
24	0
27	0
60	0
60	0
64	0
68	0
66	0
64	0
51.6	0

b1

RS15165-B Cracking	RS15165-B Rutting
32	0
31	0
65	0
25	0
25	0
60	0
66	0
66	0
73	0
70	21
51.3	2.1

Table G-3 Detect Values for Project 15502

R15502-I Cracking	R15502-I Rutting
24	33
25	25
30	0
26.5	7
31	11
26	15
24.5	12.5
25.5	0
22.5	9
25.5	27
26.5	20
24.5	15
30	9
26.2692	14.1154

Table G-4 Detect Values for Project 15630

RS15630 Cracking	RS15630 Rutting
21.5	0
17	0
19.5	0
10	0
11	0
10	0
24.5	0
16	0
9.5	0
15.444	0

Table G-5 Detect Values for Project 15173

RS15173 Cracking	RS15173 Rutting
64	33
35	0
41	41
38	41
48	41
31	0
22	0
30	41
23	41
24	41
19	41
27	41
45	41
34.3846	30.9231

Table G-6 Detect Values for Project 15174

RS15174-A Cracking	RS15174-A Rutting
46	0
25.5	0
48.5	0
57.5	0
63.5	0
54	0
71	0
98.5	0
58.5	0
59	0
25	0
57	0
55.3333	0

RS15174-B Cracking	RS15174-B Rutting
60	0
78	0
35	0
79	0
67	0
46	0
80	0
69.5	0
50	0
65	0
100	0
66	0
71	0
46	9
65.1786	0.6429

Table G-7 Detect Values for Project 15309

R15309-A Cracking	R15309-A Rutting
33	0
35	0
40	0
31	0
28	0
25	0
36	0
14	0
17	0
9	0
25	0
20	0
40	0
29	0
27	0
32	0
33	0
29	0
31	0
23	0
44	0
41	0
50	0
40	0
30.5	0

R15309-E Cracking	R15309-E Rutting
24	0
19	0
44	0
35	0
16	0
15	0
21	0
42	0
42	0
18	0
23	0
42.5	0
47	0
29.8846	0

Table G-8 Detect Values for Project 15617

RS15617-A Cracking	RS15617-A Rutting
30	0
21	0
28	0
22	0
54	0
68	0
49	0
42	0
54	0
48	0
44.5	0
53.5	0
42.8333	0

RS15617-B Cracking	RS15617-B Rutting
7.5	0
22	0
20	0
45.5	0
20	0
61	0
30	0
42	0
62	0
55.5	0
27	0
44	0
20	0
37.4167	0

Table G-9 Average Rutting Detect Value for all projects

Project Number	Rutting
14643	4.2
15165-a	0
15165-a1	0
15165-b	0
15165-b1	0
15308	1.05
15502	14.1154
15404a	
15630	0
15173	
15174	0.64286
15309	0
15617	

Table G-10 Average Cracking Detect Value for all projects

Project Number	Cracking
14643	24.0
15165-a	
15165-a1	36.559
15165-b	51.45
15165-b1	51.45
15308	72.538
15502	26.2692
15404a	
15630	15.4444
15173	
15174	65
15309	29.88
15617	

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BRANCH Rt 27 SECTION R14643 - A 322

DATE 5/29/93 SAMPLE UNIT 2 SB

SURVEYED BY RF AREA OF SAMPLE 156x12 = 1872 sq

Distress Types

1. Alligator Cracking
2. Bleeding +
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	11			
QUANTITY & SEVERITY	11.5 L	1 X 2	10 X 12			
	.5 M	1 X 3				
	6 L	1 X 2				
	7 L	1 X 3				
	12 L					
	9.5 L					
	7 L					
TOTAL SEVERITY L	53	10	120			
TOTAL SEVERITY M	5					
TOTAL SEVERITY H						

Bump pat-1 pat-1. 1 X 1.5

R-14643 Rutting

0 0 0 0 41.5 1.5 41.5

R-146 Crack

16 36.5

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	12.8	L	7
10	.3	M	2
1	.5	L	7
11	1.64	L	12
q=	TOTAL DEDUCT VALUE		28
	CORRECTED DEDUCT VALUE (CDV)		15.5

PCI = 100 - CDV = 84.5

RATING = Very Good

Add 15.4

NB

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

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Figure E-2.

Mile Marker 19 is 47'3" into section

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323

BRANCH R+27 SECTION R14643-A

DATE 5/29/93 SAMPLE UNIT 2N13

SURVEYED BY RF AREA OF SAMPLE 156×12 = 1872 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	11	10	1	7		
QUANTITY & SEVERITY	12×8 L	8 L	1×2 L	117		
		12 L	1×2 L			
		156 L	1×3			
		6 L	1×3			
		12 L	1×2			
		7 L	1×3			
		25.5 L				
		12 L				
TOTAL SEVERITY L	96	238.5	15	117		
M						
H						

12
117

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
11	5.1	L	10
10	12.7	L	19
1	.8	L	9
7	6.3	L	8.5
q=	TOTAL DEDUCT VALUE		46.5
	CORRECTED DEDUCT VALUE (CDV)		34

PCI = 100 − CDV = 66

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

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Figure E-2.

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BRANCH Rt 27 SECTION R 14643-A 324

DATE 5/29/93 SAMPLE UNIT 4NB

SURVEYED BY RF AREA OF SAMPLE 156x12 = 1872 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	1				
QUANTITY & SEVERITY		1 H	2x1 L				
		11 L	2x1 L				
		12 L					
		12 L					
		12 L					
		8 L					
		76.5 L					
TOTAL SEVERITY	L	131.5	4				
	M	1					
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	7.0	L	13.5
10	.1	M	0
1	.2	L	4
q=	TOTAL DEDUCT VALUE		17.5
	CORRECTED DEDUCT VALUE (CDV)		17

PCI = 100 - CDV = 83

RATING = Very good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

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Figure E-2.

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BRANCH Rt 27 SECTION R14643-A 325

DATE 5/29/93 SAMPLE UNIT 4 SB

SURVEYED BY RF AREA OF SAMPLE 156 x 12' = 1872 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	10	13	10		
QUANTITY & SEVERITY	1x1.5	10.5 L	1	40.5 L		
		1 M				
		11 L				
		156 L				
		12 L				
		1 M				
		11 L				
		12 L				
		12 L				
TOTAL SEVERITY L	1.5	224.5	1	40.5		
M		12				
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	.1	L	4
10	12P	L	8.5
10	.1	M	0
13	.05	L	13
q=	TOTAL DEDUCT VALUE		35.5
	CORRECTED DEDUCT VALUE (CDV)		26

PCI = 100 - CDV = 74

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

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Figure E-2.

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BRANCH Rt 27 SECTION R 14643-A 326

DATE 5/29/93 SAMPLE UNIT TSB

SURVEYED BY RE AREA OF SAMPLE 156 X 12 = 1872 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	11	10	1			
QUANTITY & SEVERITY	6.5 X 12	1 L	1 X 2 L			
		12 L	1 X 2.5 L			
		12 L	1 X 2			
		4.5 L				
		7.5 L				
		10 L				
		5.5 L				
		12 L				
		12 L				
TOTAL SEVERITY L	78	76.5	6.5			
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
11	4.2	L	9
10	4.1	L	9
1	4	L	6
q=	TOTAL DEDUCT VALUE		24
	CORRECTED DEDUCT VALUE (CDV)		13

PCI = 100 - CDV = 87

RATING = Excellent

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

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Figure E-2.

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BRANCH R+27 SECTION R14643-A 327

DATE 5/29/93 SAMPLE UNIT 7NB

SURVEYED BY RF AREA OF SAMPLE 156 x 12' = 1872 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	1	10			
QUANTITY & SEVERITY		1 M	1.5 x 2 L	12 L			
		11 L	1 x 2 L	2.5 L			
		11.5 L	2.5 x 1 L				
		11 L					
		10.5 L					
		8.5 L					
		42 L					
		12 L					
		156 L					
TOTAL SEVERITY	L	262.5	7.5	14.5			
	M	1					
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	14.8	L	20
10	2.1	M	0
1	0.4	L	6
q=	TOTAL DEDUCT VALUE		26
	CORRECTED DEDUCT VALUE (CDV)		19

PCI = 100 - CDV = 81

RATING = very good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

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Figure E-2.

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BRANCH RT 27 SECTION R146 43-A 328

DATE 5/29/93 SAMPLE UNIT 9NB

SURVEYED BY RF AREA OF SAMPLE 156x12= 1872 a|

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	1	7	11	10	
QUANTITY & SEVERITY		7.5 L	1X2	25 L	9.5X12	3 L	
		1 L	1X2	62.5 L		2 L	
		1 L	1X2			12 L	
		6.5 L				10 L	
		1.4 M					
		5 L					
		2 M					
		10 L					
		16 L					
TOTAL SEVERITY	L	37	6	87.5	102	27	
	M	3.5					
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	3.4	L	8
10	0.2	M	1
1	0.3	L	5
7	4.7	L	7
11	5.5	L	10
q=	TOTAL DEDUCT VALUE		31
	CORRECTED DEDUCT VALUE (CDV)		18

PCI = 100 - CDV = 82

RATING = VERY GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

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Figure E-2.

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329

BRANCH Rt 27 SECTION R 14643-A

DATE 5/29/93 SAMPLE UNIT 95B

SURVEYED BY RF AREA OF SAMPLE 156x12 = 1872 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		1	10	11	10		
QUANTITY & SEVERITY		1x2.5	9.5 L	8.5x12	12 L		
		1x2.5	7.5 L		1 M		
		1x1	5.5 L		10 L		
			9.5		8 L		
			12 L		4 L		
			11.5 L		5 L		
			1 L		1 L		
			6 L		4 L		
			4 L				
TOTAL SEVERITY	L	6	66.5	102	44		
	M				1		
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	0.3	L	5
10	5.9	L	12
10	0.1	M	0
11	5.5	L	10
q=	TOTAL DEDUCT VALUE		27
	CORRECTED DEDUCT VALUE (CDV)		20

PCI = 100 - CDV = 80

RATING = VERY GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R+ 37 SECTION R14643-A 330

DATE 5/27/93 SAMPLE UNIT 12 SB

SURVEYED BY RF AREA OF SAMPLE 156x12= 1872 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		1	10	10			
QUANTITY & SEVERITY		1x2	10 L	11 L			
		1x2	12 L	8.5 L			
		1x2	5 L	9 L			
		1x4	10 L	2 L			
		1x2	12 L	15 L			
		1x3	3.5 L	5 L			
			6 L	2.5 L			
			7.5 L	4 L			
			4 L				
TOTAL SEVERITY	L	15	70	57			
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	0.8	L	9
10	6.8	L	13
q=	TOTAL DEDUCT VALUE		22
	CORRECTED DEDUCT VALUE (CDV)		16

PCI = 100 - CDV = 84

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

331

BRANCH Rt 27 SECTION R14643-A

DATE 5/27/93 SAMPLE UNIT 12 NB

SURVEYED BY RF AREA OF SAMPLE 156 x 12 = 1872 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	10	1			
QUANTITY & SEVERITY	156 L	1 M	1 x 2			
	12 L	11 L	1 x 2			
	7 L	5 L				
	10 L	12 L				
	2 M	1 L				
	10 L	1 M				
	1 L	7 L				
	2 L					
	12 L					
TOTAL SEVERITY L	210	36	4			
TOTAL SEVERITY M	2	2				
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	13.1	L	19
10	0.2	M	1
1	0.2	L	4
q=	TOTAL DEDUCT VALUE		24
	CORRECTED DEDUCT VALUE (CDV)		24

PCI = 100 - CDV = 76

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 27 SECTION R14643-A 332

DATE 5/29/97 SAMPLE UNIT 14NB

SURVEYED BY RF AREA OF SAMPLE 156x12 = 1872 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	10				
QUANTITY & SEVERITY	12 L	6.5 L				
	5 L	12 L				
	12 L	3.5 L				
	2 L					
	10 L					
	2 M					
	1 M					
	9 L					
	1.5 L					
TOTAL SEVERITY L	51.5	22				
TOTAL SEVERITY M	2					
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	39	L	9
10	0.1	M	0
q=	TOTAL DEDUCT VALUE		9
	CORRECTED DEDUCT VALUE (CDV)		9

PCI = 100 − CDV = 91

RATING = Excellent

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

333

BRANCH RT 27 SECTION R 14643-A

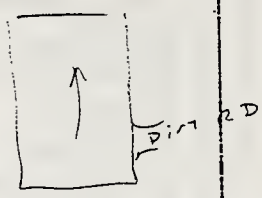
DATE 5/29/93 SAMPLE UNIT 14 SB

SURVEYED BY RE AREA OF SAMPLE 156 X 12 = 1872 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	4	1	10		
QUANTITY & SEVERITY	8 L	2 L	1 x 4 L	9 L		
	1 L	2 L	1 x 4 L	7 L		
	156 L		1 x 2 L	8 L		
	12 L			6.5 L		
	12 L			12 L		
	6.5 L			2.5 L		
	12 L					
	12					
	12 L					
TOTAL SEVERITY L	220.5	4	10	45		
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	14.2	L	20
4	0.2	L	1
1	0.5	L	7
q=	TOTAL DEDUCT VALUE		28
	CORRECTED DEDUCT VALUE (CDV)		21

PCI = 100 - CDV = 79

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 27 SECTION R14643-A 334

DATE 1/29/93 SAMPLE UNIT 17 SB

SURVEYED BY RF AREA OF SAMPLE 156x12 = 1872 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	10			
QUANTITY & SEVERITY	1 L	1 x 2	8 L			
	12 L	1 x 2	11 L			
	7 L	1 x 3	11 L			
	8 L	1 x 2	1 M			
	11 L	1 x 3	8.5 L			
	6 L		5 L			
	12 L		3.5 L			
	7 L		1.7 L			
	9.5 L		3 L			
TOTAL SEVERITY L	73.5	12	56			
M			1			
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	x69	L	13
10	0.01	M	0
1	0.6	L	7.5
q=	TOTAL DEDUCT VALUE		20.5
	CORRECTED DEDUCT VALUE (CDV)		15

PCI = 100 - CDV = 85

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

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BRANCH R< 27 SECTION N 14643-A

DATE 5/29/93 SAMPLE UNIT 17 NB

SURVEYED BY RS AREA OF SAMPLE 156x12 = 1872 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	1	10	10			
QUANTITY & SEVERITY		1x2 L	156 L	9 L			
		1x2 L	8 L				
		1x5 L	12 L				
		1x2 L	9 L				
		1x2 L	7 L				
		1x9 L	2 M				
		8 L	2.5 L				
			2.5 M				
			9.5 L				
TOTAL SEVERITY	L	30	202	9			
	M		4.5				
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	1.6	L	14
10	11.3	L	18
10	0.2	M	1
q=	TOTAL DEDUCT VALUE		33
	CORRECTED DEDUCT VALUE (CDV)		24

PCI = 100 − CDV = 76

RATING = very. Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 27 SECTION R14643-A 336

DATE 5/29/93 SAMPLE UNIT 19 NB

SURVEYED BY RE AREA OF SAMPLE 156 x 12 = 1872 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	10	15	10	7	
QUANTITY & SEVERITY	1X3 L	9 L	2x156	3 L	12 L	
	1X3 L	12 L	2x156	2 L	2 L	
	2x4 L	1 L		6.5 L		
	2x4 L	6 L		12 L		
		12 L				
		2 L				
		4.5 L				
		11.5 L				
		9 L				
TOTAL SEVERITY L	22	67	624	23.5	14	
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	1.2	L	12
10	4.8	L	11
15	33.3	L	41.5
7	0.8	L	3
q=	TOTAL DEDUCT VALUE		67.5
	CORRECTED DEDUCT VALUE (CDV)		43

PCI = 100 - CDV = 57

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R+27 SECTION R14643-A

DATE 5/29/93 SAMPLE UNIT 19 SB

SURVEYED BY RF AREA OF SAMPLE 156x12 = 1872 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	1	10			
QUANTITY & SEVERITY		150 L	1x12 L	14 L			
		1 L	1x1 L	10 L			
		11 L	4x1.5 L	6 M			
		9 L		9 L			
		6.5 L		2 L			
		22.5 L					
		6.5 L					
		7 L					
		2 L					
TOTAL SEVERITY	L	221.5	19	31			
	M			6			
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	13.5	L	19
10	0.3	M	2
1	1.0	L	11
q=	TOTAL DEDUCT VALUE		32
	CORRECTED DEDUCT VALUE (CDV)		23

PCI = 100 - CDV = 77

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rx 27 SECTION R14643-A 338

DATE 5/29/93 SAMPLE UNIT 2058

SURVEYED BY RE AREA OF SAMPLE 156 x 12 = 1872 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	15	10		
QUANTITY & SEVERITY	12 L	2x3 L	1x2 L	7 L		
	156 M	1x1 L	1x2 L	5 L		
	12 L			12 L		
	2.5 L					
	12 L					
	12 L					
	8 L					
	12 L					
	5 L					
TOTAL SEVERITY L	75.5	7	4	24		
TOTAL SEVERITY M	156					
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	5.3	L	12
10	8.3	M	28.5
1	0.9	L	6
15	0.2	L	1.5
q=	TOTAL DEDUCT VALUE		48
	CORRECTED DEDUCT VALUE (CDV)		35

PCI = 100 - CDV = 65

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

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BRANCH R+27 SECTION R14643-A

DATE 5/29/93 SAMPLE UNIT 22 N13

SURVEYED BY RF AREA OF SAMPLE 156x12 = 1872 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	15	1	10		
QUANTITY & SEVERITY	1 L	2 x 156 L	1 x 3 L	11 L		
	12 L	2 x 156 L		11 L		
	6.5 L			1 M		
	2 L			11 L		
	10 L			5 M		
	2 M					
	1 L					
	4 L					
	7 L					
TOTAL SEVERITY L	43.5	624	3	33		
TOTAL SEVERITY M	2			6		
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	4.1	L	9
10	2.4	M	3
15	33.3	L	41.5
1	0.2	L	4
q=	TOTAL DEDUCT VALUE		57.5
	CORRECTED DEDUCT VALUE (CDV)		43

PCI = 100 - CDV = 57

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH RW 27 SECTION R 14643 - A 340

DATE 5/29/93 SAMPLE UNIT 24 NB

SURVEYED BY RF AREA OF SAMPLE 156 x 12 = 1872 sq ft

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		11	10	10			
QUANTITY & SEVERITY		10 x 12	4 L	1.5 L			
			10 L	11 L			
			2 M	1 M			
			1 L				
			4.5 L				
			13 L				
			7 L				
			12 M				
			6 L				
TOTAL SEVERITY	L	120	45.5	26			
	M		14	1			
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
11	6.4	L	12
10	3.8	L	9
10	0.8	M	7
q=	TOTAL DEDUCT VALUE		28
	CORRECTED DEDUCT VALUE (CDV)		15

PCI = 100 - CDV = 85

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

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BRANCH Rt 27 SECTION R14643 -A

DATE 5/29/93 SAMPLE UNIT #24 SB

SURVEYED BY BF AREA OF SAMPLE 156 x 12' = 1872 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		1	10	11		
QUANTITY & SEVERITY	12 L	1 x 3 L	12 L	12 x 8.5		
	12 L	6.5 x 1.5 L				
	12 M					
	156 L					
	11 L					
	12 L					
	2 L					
	3 L					
	12 L					
TOTAL SEVERITY L	220	12.75	12	102		
TOTAL SEVERITY M	12					
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	12.1	L	19
10	06	M	5.5
1	0.7	L	8.5
11	5.5	L	10
q=	TOTAL DEDUCT VALUE		43
	CORRECTED DEDUCT VALUE (CDV)		21

PCI = 100 - CDV = 79

RATING = VERY GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R+27 SECTION R14643-B 342

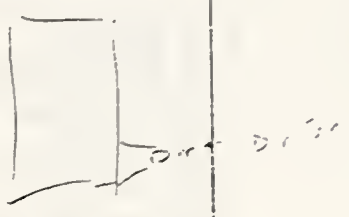
DATE 5/29/93 SAMPLE UNIT 2 W3

SURVEYED BY R= AREA OF SAMPLE 203x12 = 2436 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	10	7			
QUANTITY & SEVERITY	1.5 x 3	5 M	16.3 L			
	2 x 4	12 L				
	1 x 4	4 L				
	1 x 4	10.5 L				
	1 x 3	8.5 L				
	1 x 2	4 L				
		2 M				
		126 L				
TOTAL SEVERITY L	29.5	165	163			
M		7				
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	12	L	12
10	6.8	L	13
10	0.3	M	2
7	6.7	L	9
q=	TOTAL DEDUCT VALUE		36
	CORRECTED DEDUCT VALUE (CDV)		22

PCI = 100 - CDV = 78

RATING = very. Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

AVE 77.4

ASPHALT PAVEMENT INSPECTION SHEET

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343

BRANCH R+ 27 SECTION R 14643-B

DATE 5/29/93 SAMPLE UNIT 7 WB

SURVEYED BY RF AREA OF SAMPLE 208x12 = 2436 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	7	1			
QUANTITY & SEVERITY	12 L	47 L	1 x 3			
	6 L	12 L	1 x 3			
	4 M	112	1 x 4			
	4 L		1 x 2			
	17 L		1 x 2			
	8.5 L		2 x 4			
	8 L		2 x 5			
	3 L					
	97 L					
TOTAL SEVERITY L	155.5	166	32			
TOTAL SEVERITY M	4					
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	6.4	L	12.5
10	0.2	M	1
7	1.68	L	9
1	1.3	L	13
q=	TOTAL DEDUCT VALUE		35.5
	CORRECTED DEDUCT VALUE (CDV)		21

PCI = 100 - CDV = 79

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

344

BRANCH RT 27 SECTION R 14643-B

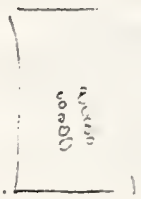
DATE 5/29/93 SAMPLE UNIT 11 12.3

SURVEYED BY RF AREA OF SAMPLE 203 X 12 = 2436 ft²

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		10	1	7	1		
QUANTITY & SEVERITY		7 L	1 X 3	18 L	1 X 3		
		9 L	1 X 2	6 L	1 X 4		
		6 L	1 X 3	3 L	1 X 4		
		7 L	1 X 3		1 X 2		
		4 L	1 X 3		1 X 3		
		57 L	1.5 X 3		1 X 2		
		3 L	1 X 2				
		6 L	1 X 3				
		5 L	1 X 2				
TOTAL SEVERITY	L	104	27.5	27	18		
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	4.3	L	9
1	18	L	16
7	11	L	3
q=	TOTAL DEDUCT VALUE		28
	CORRECTED DEDUCT VALUE (CDV)		20.5

PCI = 100 - CDV = 79.5

RATING = very good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

12 cores

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

345

BRANCH A+27 SECTION R14643-B

DATE 5/29/93 SAMPLE UNIT 160 41.3

SURVEYED BY RF AREA OF SAMPLE 203 x 12' = 2436 sf

Shoulder 8'

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	1				
QUANTITY & SEVERITY		5 L	1x3				
		6.5 L	1x4				
		8 L	1x3				
		36 L	1x2.5				
			1x2				
			1x2				
TOTAL SEVERITY	L	54.5	16.5				
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	2.2	L	5
1	0.7	L	9
q=	TOTAL DEDUCT VALUE		14
	CORRECTED DEDUCT VALUE (CDV)		14

PCI = 100 − CDV = 86

RATING = Excellent

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R-27 SECTION R1463-B 346

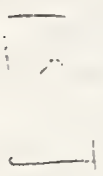
DATE 5/29/93 SAMPLE UNIT 21 w.s.

SURVEYED BY RF AREA OF SAMPLE 203 x 12 = 2436 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	7	10	1			
QUANTITY & SEVERITY		52 L	6 L	1.5 x 3			
			7 L	1.5 x 3			
			5 L	1 x 3			
			12.5 L	1 x 2			
			68.5 L	1 x 3			
				1 x 4			
				1 x 3.5			
				1 x 2			
TOTAL SEVERITY	L	52	93	26.5			
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	2.1	L	4
10	3.8	L	9
1	1.1	L	11.5
q=	TOTAL DEDUCT VALUE		24.5
	CORRECTED DEDUCT VALUE (CDV)		18

PCI = 100 - CDV = 82

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Q+27 SECTION R14643-B 347

DATE 5/29/93 SAMPLE UNIT 26 W3

SURVEYED BY RF AREA OF SAMPLE 203x12 = 2436 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shaving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	7	1	10			
QUANTITY & SEVERITY		131 L	2x5	12 L			
			1x8	2 M			
			1x3	2 M			
			1x3	2 M			
			1x3	4 L			
			1x3	6 L			
				96 L			
TOTAL SEVERITY	L	131	30	118			
	M			6			
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	5.4	L	7.5
1	1.2	L	12
10	4.8	L	11
10	0.3	M	2
q=	TOTAL DEDUCT VALUE		32.5
	CORRECTED DEDUCT VALUE (CDV)		19

PCI = 100 - CDV = 81

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9, and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

348

BRANCH R+27 SECTION R14643-B

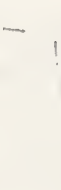
DATE 5/29/93 SAMPLE UNIT 31 U.S

SURVEYED BY RF AREA OF SAMPLE 203x12 = 2436 ft

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	1	10	7	11	10	
QUANTITY & SEVERITY		1x3	3 M	190.5 M	12x12.5	61.5 M	
		1x3	2 L	12.5 L			
		1.5x11	12 L				
		2x4	3 M				
		1x3	12 L				
		1x5	106 L				
		1x3	7 L				
		1x3	4.5 L				
			1.5 M				
TOTAL SEVERITY	L	34	143.5	12.5	150		
	M		7.5	190.5		61.5	
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	1.4	L	13
10	5.9	L	12
10	2.8	M	16.5
7	0.5	L	2.5
7	7.8	M	22
11	6.2	L	11.5
q=	TOTAL DEDUCT VALUE		77.5
	CORRECTED DEDUCT VALUE (CDV)		40

PCI = 100 − CDV = 60

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 27 SECTION R14643-B 349

DATE 5/29/93 SAMPLE UNIT 35 w.s.

SURVEYED BY RF AREA OF SAMPLE 203 x 12 = 2436 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	7	1	10		
QUANTITY & SEVERITY	9 L	61 L	1 x 3	6 L		
	2 L	9 L	1 x 3	10.5 L		
	11.5 L	33 L	1 x 4			
	6 L		1 x 3			
	5 L		1 x 1			
	12 L		1 x 4			
	7 L		1 x 4			
	7.5 L		1 x 4			
	94.5 L		1 x 2			
TOTAL SEVERITY L	154.5	103	28	16.5		
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	7.0	L	13.5
7	4.2	L	6.5
1	1.2	L	12
q=	TOTAL DEDUCT VALUE		32
	CORRECTED DEDUCT VALUE (CDV)		19

PCI = 100 − CDV = 81

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 27 SECTION R14643-B 350

DATE 5/29/93 SAMPLE UNIT 40 WB

SURVEYED BY RF AREA OF SAMPLE 203 x 12 = 2436 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	7	10	1	10		
QUANTITY & SEVERITY	111 L	12 L	3 x 5 L	1 M		
		3 M	1 x 3	7.5 L		
		9 L	1 x 3			
		6 L	1 x 1			
		9 L	1 x 3			
		1 M	1 x 3			
		9 L	1 x 2			
		5 L	1 x 2			
		117 L				
TOTAL SEVERITY L	111	169	32	7.5		
M		4		1		
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	4.6	L	7
10	7.3	L	13.5
10	0.2	M	1
1	1.3	L	13
q=	TOTAL DEDUCT VALUE		34.5
	CORRECTED DEDUCT VALUE (CDV)		20

PCI = 100 - CDV = 80

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

Mile Marker 12 57

51' into section

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH RF 27 SECTION R14643-B 351

DATE 5/29/93 SAMPLE UNIT 44 W.B

SURVEYED BY RF AREA OF SAMPLE 203X12 = 2436 ft

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	10	7	1	10	
QUANTITY & SEVERITY	1X2	8.5 L	12 L	3X3 L	16.3 L	
	1X3	8 L	21.5 L	1.5X4 L	6 L	
	1X3	1 M	33	1.5X3		
	1X2.5	5.5	11 L	1X2.		
	1X2	9 L		1X3		
	1X1	4 L		1X3		
	1X5	5 L				
	1X8	9.5 L				
	1X4	7				
TOTAL SEVERITY L	26.5	56.5	77.5	27.5	169	
M		1				
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	2.2	L	17
10	2.3	L	5
10	.04	M	0
7	3.2	L	5
q=	TOTAL DEDUCT VALUE		27
	CORRECTED DEDUCT VALUE (CDV)		27

PCI = 100 - CDV = 73

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R+ 27 SECTION R14643-B 352

DATE 5/28/93 SAMPLE UNIT 49 W.B.

SURVEYED BY RF AREA OF SAMPLE 203x12 = 2436 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	7	1	11	10	
QUANTITY & SEVERITY		12 L	183 L	1.5x5	12x9.5 L	12 L	
		2 L		1x5		11 L	
		12 L		1x3		3 L	
		2 L		1x3		12 L	
		6 L		1x2		9 L	
		5 L		1x3		12 L	
		59.5 L		1x5		30 L	
		10 L		1x3			
TOTAL SEVERITY	L	108.5	183	31.5	114	89	
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	8.1	L	15
7	7.5	L	4.5
1	13	L	13
11	4.7	L	9
q=	TOTAL DEDUCT VALUE		46.5
	CORRECTED DEDUCT VALUE (CDV)		24

PCI = 100 - CDV = 76

RATING = VERY GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 77 SECTION R1643-B 353

DATE 5/29/93 SAMPLE UNIT 54 W.S.

SURVEYED BY RE AREA OF SAMPLE 203x12 = 2436 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	7	1	10	
QUANTITY & SEVERITY	7.5 L	1x3	203'	1x12	73.5 L	
	10 L	1x3		2x5	3 L	
	9.5 L	1x4		.5x3		
	5 L	1x3				
	13 L	2x4				
	5 L	1x3				
	12 L	4x2				
	6 L	1x2				
	7 M	1x5				
TOTAL SEVERITY L	63	39	203	23.5	76.5	
TOTAL SEVERITY M	7					
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	5.7	L	12
10	0.3	M	2
1	2.6	L	19
7	3.3	L	10
q=	TOTAL DEDUCT VALUE		43
	CORRECTED DEDUCT VALUE (CDV)		26

PCI = 100 - CDV = 74

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 27 SECTION R14643-B 354

DATE 5/29/93 SAMPLE UNIT 58 UB 12 UB

SURVEYED BY RF AREA OF SAMPLE 203 x 12' = 2436 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	1	10	7	1	10	
QUANTITY & SEVERITY		1x3 L	6 L	203 L	~~1 L~~	187 L	
		1x3 L	2 L		~~1 L~~		
		1x7 L	12 L				
		1x3 L	4 L				
		1x3 L	7 L				
		1x3 L	12 L				
		1x2 L	11 L				
		1x3 L	4 L				
		1x2 L	3 L				
TOTAL SEVERITY	L	29	61	203		187	
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	1.2	L	12
10	10.2	L	18.5
7	8.3	L	10
q=	TOTAL DEDUCT VALUE		40.5
	CORRECTED DEDUCT VALUE (CDV)		24

PCI = 100 - CDV = 76

RATING = very GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

Mile Marker 14 is 93'6" into Section 5

66 ... 203'

Do 13

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 44 SECTION RS 15165-A 355

DATE 5/19/93 SAMPLE UNIT 2WB

SURVEYED BY RF AREA OF SAMPLE 151' x 10' = 1510

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	9	10	19	3		
QUANTITY & SEVERITY	96 L	10'	3.5 x 21	22 x 4		
		3.5'	3 x 61	9 x 14'		
		6.5	~~19 x 25~~	4 x 34		
		12'				
TOTAL SEVERITY L	96	32	256.5	350		
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
9	6.4	L	8.5
10	2.1	L	5
19	17.0	L	7
3	23.2	L	14
q=	TOTAL DEDUCT VALUE		34.5
	CORRECTED DEDUCT VALUE (CDV)		20

PCI = 100 - CDV = 80

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ARMY 705

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS 1516S-A

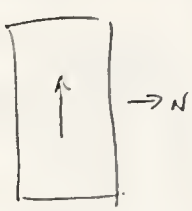
DATE 5/19/93 SAMPLE UNIT 3 W, B. 356

SURVEYED BY EF AREA OF SAMPLE 151 x 10' = 1510

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	3	10	1	19	9	
QUANTITY & SEVERITY		18 x 4.5	10'	1 x 3	3 x 151	81 L	
		5 x 2	10'		3 x 61	70 M	
			8'				
			8'				
			10				
			4.5				
TOTAL SEVERITY	L	91	45.5	3	10360	81	
	M					70	
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3 ✓	6.0	L	5.5
10 ✓	3.0	L	7
1 ✓	.20	L	4
19	42.1	L	11.5
9	5.4	L	7
9	4.6	M	10
q=	TOTAL DEDUCT VALUE		45
	CORRECTED DEDUCT VALUE (CDV)		20

PCI = 100 - CDV = 80

RATING = very GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

357

BRANCH Rt 44 SECTION RS 15165-A

DATE 5/19/93 SAMPLE UNIT 5443

SURVEYED BY RF AREA OF SAMPLE 151 x 10' = 1510

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	19	9	3	10	
QUANTITY & SEVERITY	19 x 3	3.5 x 24	151 M	19 x 6	10'	
		7 x 12		8 x 3	10'	
		3 x 37		5 x 1.5		
		4.5 x 44		1.5 x 4		
		9 x 14		3 x 44		
				9 x 37		
				12 x 3		
TOTAL SEVERITY L	57	533		652.5	20	
TOTAL SEVERITY M			151			
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	3.8	L	22.5
19	35.3	L	10.5
9	10	M	19
3	43.2	L	19
10	1.3	L	3
q=	TOTAL DEDUCT VALUE		74
	CORRECTED DEDUCT VALUE (CDV)		42

PCI = 100 - CDV = 58

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS15165-A 358

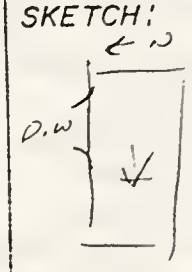
DATE 5/19/93 SAMPLE UNIT 8 W,B

SURVEYED BY RF AREA OF SAMPLE 151 X 10 = 1510

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	1	10	3	9	19	
QUANTITY & SEVERITY		11.5 x 1	9.5	3 x 19.5	30 H	5 x 31	
			22.1	4.5 x 11.5		5 x 25	
			15'	3 x 15		4.5 x 41	
				9 x 3			
				9 x 25			
				3 x 31			
TOTAL SEVERITY	L	11.5	46.5	500.25		464.5	
	M				30		
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	.8	L	9
10	3.1	L	7.5
3	33.1	L	16.5
9	2.0	M	6
19	30.8	L	11
q=	TOTAL DEDUCT VALUE		50
	CORRECTED DEDUCT VALUE (CDV)		23

PCI = 100 − CDV = 77

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R-44 SECTION RS 15165-A

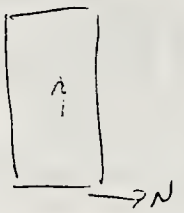
DATE 5/19/93 SAMPLE UNIT 11 WB

SURVEYED BY RF AREA OF SAMPLE 151×10.5' = 1585.5

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	9	3	19	1		
QUANTITY & SEVERITY	39 L	9×26'	3×25	7.5'		
	112 M	3×10	4×13	7'		
		4.5×11	2×37	3'		
		3×16	5×61	10'		
		7×71		8'		
TOTAL SEVERITY L	39	574.5	506	35.5		
TOTAL SEVERITY M	112					
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
9	2.5	L	4
9	7.1	M	14
3	36.2	L	17
19	31.9	L	10
1	2.2	L	17
q=	TOTAL DEDUCT VALUE		62
	CORRECTED DEDUCT VALUE (CDV)		34

PCI = 100 − CDV = 66

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

mile marker 52' from section 13

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ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS 15165-A 360

DATE 5/19/93 SAMPLE UNIT 13 W.B.

SURVEYED BY RF AREA OF SAMPLE 151 x 10.5' = 1585.5

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	1	3	19	9		
QUANTITY & SEVERITY		12.5 x 1	151 x 10.5	4 x 121	114 L		
			-12.5		40 H		
TOTAL SEVERITY	L	12.5	1573	484	114		
	M				40		
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	.8	L	9
3	99.2	L	28
19	30.5	L	9.5
9	7.2	L	9
9	2.5	M	7
q=	TOTAL DEDUCT VALUE		62.5
	CORRECTED DEDUCT VALUE (CDV)		31

PCI = 100 - CDV = 69

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

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BRANCH RT 44 SECTION RS 15165-A

DATE 5/19/93 SAMPLE UNIT 15 WB

SURVEYED BY RF AREA OF SAMPLE 10.5 x 151 = 1585.5

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	3	9	1	19	
QUANTITY & SEVERITY		9.5 L	1.5 x 1	136 L	17.5 x 3'	6 x 12	
		4.5 L	20.5 x 5'	9 M		4 x 30	
		5' L	30 x 2			2 x 30	
		2' M	2 x 15				
		7.5 L					
		6'					
TOTAL SEVERITY	L	34.5	194	136	52.5	252	
	M			9			
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	2.2	L	5
3	12.2	L	9
9	8.6	L	10.5
9	.6	M	4
1	3.3	L	21
19	15.9	L	7
q=	TOTAL DEDUCT VALUE		56.5
	CORRECTED DEDUCT VALUE (CDV)		31

PCI = 100 - CDV = 69

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rec 44
DATE 5/19/93
SURVEYED BY RF

SECTION RS-15165-A 362
SAMPLE UNIT S1 W.B.
AREA OF SAMPLE 10.5' x 151' = 1585.5

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	1	3	19	9		
QUANTITY & SEVERITY		2x1 L	151 x 9'	2 x 10	114 M		
		1' x 50' L		4 x 181	37 L		
TOTAL SEVERITY	L	52	1359	504	37		
	M				114		
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	3.3	L	21
3	85.7	L	25.5
19	31.8	L	10
9	2.3	L	4
9	7.2	M	14
q=	TOTAL DEDUCT VALUE		74.5
	CORRECTED DEDUCT VALUE (CDV)		42

PCI = 100 - CDV = 58

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R+44 SECTION RS 15165 - A 363

DATE 5/19/93 SAMPLE UNIT 24

SURVEYED BY RF AREA OF SAMPLE 151 X 10.5' = 1585.5

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		3	19	9	1		
QUANTITY & SEVERITY		151 x 9'	2.5 x 15	33 M	3' x 4 L		
			4' x 26				
			3' x 77.5				
			1.5 x 30				
TOTAL SEVERITY	L	1359	419		12		
	M			33			
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3	85.7	L	25.5
19	26.4	L	9
9	2.1	M	6
1	.8	L	9
q=	TOTAL DEDUCT VALUE		49.5
	CORRECTED DEDUCT VALUE (CDV)		26

PCI = 100 - CDV = 74

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 44 SECTION RS 15165-A 364

DATE 5/19/93 SAMPLE UNIT 18 W.B.

SURVEYED BY RF AREA OF SAMPLE 151 x 10.5' = 1585.5

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	19	1	3	9		
QUANTITY & SEVERITY		1x3 M	1.5x5 L	4.5x41	69 L		
		2x10 L		9 x 120	51 M		
		1x11					
		2x60					
		5'x50					
TOTAL SEVERITY	L	301	7.5	1264.5	69		
	M	3			51		
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	19	L	7.5
19	.2	M	5.5
1 ✓	.5	L	7
3 ✓	79.8	L	25
9	4.4	L	6
9	3.2	M	8
q=	TOTAL DEDUCT VALUE		59
	CORRECTED DEDUCT VALUE (CDV)		26

PCI = 100 - CDV = 74

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

365

BRANCH Rt 44 SECTION RS 15165-A

DATE 5/19/93 SAMPLE UNIT 8 E.B

SURVEYED BY RF AREA OF SAMPLE 151 x 10' = 1510

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	3	19	10	13	9
QUANTITY & SEVERITY	2'x9' L	3x9'	2x18'	18'	3	45 L
		7x11'	1.5x21'	20'		106 M
		9x9'	3.5x17	4'		
		3x116'	4x15	8.5'		
		9x18'	3x41	4.5'		
		9x10.5		2.5'		
		9x19'				
TOTAL SEVERITY L	18	660.5	310	57.5	4	45
M						106
H						

11
2.5x1
0.5

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	1.2	L	12
3	43.7	L	19
19	20.5	L	7.5
10	3.8	L	9
13	.3	L	37
9	3.0	L	5
9	7.0	M	14
q=	TOTAL DEDUCT VALUE		104
	CORRECTED DEDUCT VALUE (CDV)		51

PCI = 100 - CDV = 49

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

Distress	Density	Sev.	Deduct value
11	.02	L	.5

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623; the proponent agency is USACE

BRANCH Rt 44 SECTION RS 15165-A 366

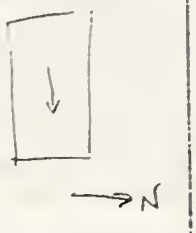
DATE 5/17/93 SAMPLE UNIT 9 EB

SURVEYED BY RF AREA OF SAMPLE 151 x 10' = 1510

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	9	19	1	3		
QUANTITY & SEVERITY		151 M	1 x 4.5 M	1.5 x 6.5 L	3.5 x 16		
			3 x 34 L	.5 x 12	4.5 x 121		
			1.5 x 10'	1 x 13	4 x 14		
			2' x 22	1 x 17	5 x 14		
TOTAL SEVERITY	L		161	45.75	726.5		
	M	151	4.5				
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
9	10	M	19
19	10.7	L	8
19	.3	M	6.5
1	3.0	L	20
3	48.1	L	20
q=	TOTAL DEDUCT VALUE		73.5
	CORRECTED DEDUCT VALUE (CDV)		38

PCI = 100 - CDV = 62

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 44 SECTION RS 15165-A 367

DATE 5/19/93 SAMPLE UNIT 11 E.B

SURVEYED BY RF AREA OF SAMPLE 151 X 10.5 = 1585.5

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shaving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	3	19	13	11	9
QUANTITY & SEVERITY	39 X 1.5	5 x 39	2 x 16	2	1 x 2'	151
		4 x 112	3 x 23			
		3 x 44				
		4 x 21				
TOTAL SEVERITY L	58.5	739	101	2	2	151
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	3.9	L	22.5
3	48.9	L	20
19	6.7	L	4
13	.01	L	21
11	.01	L	.5
9	.10	L	12
q=	TOTAL DEDUCT VALUE		80
	CORRECTED DEDUCT VALUE (CDV)		46

PCI = 100 - CDV = 54

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 44 SECTION RS 15165-A 368

DATE 5/19/93 SAMPLE UNIT 2EB

SURVEYED BY RF AREA OF SAMPLE 151 x 10' = 1510

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	13	9	3	10	19
QUANTITY & SEVERITY		2	87 L	22.5 x 9	10'	4.5 x 71
			64 M	3 x 171	31'	3.5' x 80
				2 x 2	10'	
				3x 22	7'	
				32 x 9	1'	
					1'	
					2.5'	
					7'	
					10'	
TOTAL SEVERITY	L	2	87	611.5	84.5	599.5
	M		64			
	H					

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
13	.1	L	21
9	5.8	L	8
9	4.2	M	9.5
3 ✓	40.5	L	19
10 ✓	5.6	L	12
19	39.7	L	11
q=	TOTAL DEDUCT VALUE		80.5
	CORRECTED DEDUCT VALUE (CDV)		38

PCI = 100 − CDV = 62

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

58.9

ASPHALT PAVEMENT INSPECTION SHEET

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369

BRANCH Rt 44 SECTION RS 15165-A

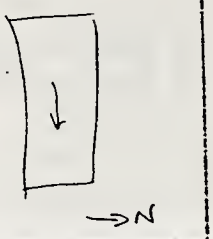
DATE 5/19/93 SAMPLE UNIT 3EB

SURVEYED BY RF AREA OF SAMPLE 151 X 10' = 1510

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	3	1	19	9		
QUANTITY & SEVERITY	7x69	3x67	1.5x61	78 L		
	4x67		8x57	73 M		
	1.5x4		1x1 M			
TOTAL SEVERITY L	757	201	548.5	151		
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3	50.1	L	20
1	13.3	L	36
19	36.3	L	10.5
9	10	L	12
q=	TOTAL DEDUCT VALUE		78.5
	CORRECTED DEDUCT VALUE (CDV)		45

PCI = 100 - CDV = 55

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS 15165-A 370

DATE 5/19/93 SAMPLE UNIT SEB

SURVEYED BY CF AREA OF SAMPLE 151 x 10' = 1510

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	3	10	1	19	9	
QUANTITY & SEVERITY		9 x 13.5	2.5	1.5 x 1.5	20	75 M	
		9 x 77	3'		20	76 L	
		1.5 x 51	4'		1 x 17		
		9 x 23'			42 SF		
					10 x 2.5		
TOTAL SEVERITY	L	1077	9.5	22.5	124	151	
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3	71.3	L	23.5
10	1.0	L	1
1	1.5	L	13.5
19	8.2	L	4
9	10	L	12
q=	TOTAL DEDUCT VALUE		54
	CORRECTED DEDUCT VALUE (CDV)		34

PCI = 100 - CDV = 66

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS-15165-A

DATE 5/19/93 SAMPLE UNIT 7 EB

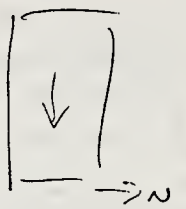
SURVEYED BY RF AREA OF SAMPLE 151 X 10' = 1510

371

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	19	3	9		
QUANTITY & SEVERITY	8 X 3.5	2 x 4	143 x 9'	79 M		
		3 x 147		72 L		
		1.5 x 51				
TOTAL SEVERITY L	28	525.5	1287	151		
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	1.9	L	16
19	34.8	L	10.5
3	85.2	L	26
9	10	L	12
q=	TOTAL DEDUCT VALUE		64.5
	CORRECTED DEDUCT VALUE (CDV)		36

PCI = 100 - CDV = 64

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS 15165-B 372

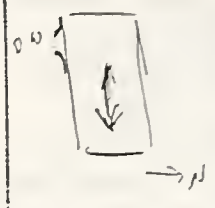
DATE 5/19/93 SAMPLE UNIT 1 W.B.

SURVEYED BY RF AREA OF SAMPLE 162 x 10.5 = 1711

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		3	19	1	9		
QUANTITY & SEVERITY		9x162'	14x3M	6x1.5	60M		
			168x2'L		83L		
TOTAL SEVERITY	L	1458	336	9	83		
	M		42		60		
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3	76	L	25
19	18	L	7
19	2	M	10
1	.5	L	7
9	4	L	6
9	3	M	7
q=	TOTAL DEDUCT VALUE		62
	CORRECTED DEDUCT VALUE (CDV)		27

PCI = 100 - CDV = 73

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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373

BRANCH RT 44 SECTION RS 15165-B

DATE 5/19/93 SAMPLE UNIT 3 W.B

SURVEYED BY RF AREA OF SAMPLE 182 x 10.5 = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	3	19	9		
QUANTITY & SEVERITY	3'	~~9x 154.5~~	4 x 27.5	150 L		
	10'	9x12	3x151	22 M		
	41	~~3x 136.5~~	~~8x 161~~			
	41	9x21				
	71	9x43				
		3x 168.5				
TOTAL SEVERITY L	28	889.5	563	150		
M				32		
H						

71
182.0
21.5
54
12
132.5
2
10
+ 1.5
4
68.5

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	1	L	11
3	47	L	20
19	30	L	10
9	8	L	10
9	2	M	16
q=	TOTAL DEDUCT VALUE		57
	CORRECTED DEDUCT VALUE (CDV)		37

PCI = 100 - CDV = 63

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS 1516J-B 374

DATE 5/19/93 SAMPLE UNIT 4 WB

SURVEYED BY RF AREA OF SAMPLE 22 x 10.5 = 191

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		1	3	9	19	10	
QUANTITY & SEVERITY		14 x 3 L	5 x 14	123 L	4 x 35'	10.5'	
		16 x 2 L	6 x 5		3 x 147		
		162 x 9					
TOTAL SEVERITY	L	1517	100	123	581	10.5	
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	79	L	59
3	5	L	5
9	6	L	8
19	30	L	9
10	10	L	1
q=	TOTAL DEDUCT VALUE		82
	CORRECTED DEDUCT VALUE (CDV)		~~93~~ 59

PCI = 100 - CDV = 41

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION LS 15165-B

DATE 5/19/93 SAMPLE UNIT 9 WB

SURVEYED BY RF AREA OF SAMPLE 182 x 10.5 = 1911

375

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	3	19	9				
QUANTITY & SEVERITY	5'x 21'	50'x 4' L	150 L				
	9'x177'	5x2 L	27 H				
		1x4 M	5 M				
		2.5x14 L					
		8x4 L					
TOTAL SEVERITY L	11603	277	150				
TOTAL SEVERITY M		4	5				
TOTAL SEVERITY H			27				

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3	84	L	25
19	15	L	7
19	.2	M	5
9	.8	L	10
9	.3	M	4
9	1	H	7
q=	TOTAL DEDUCT VALUE		58
	CORRECTED DEDUCT VALUE (CDV)		32

PCI = 100 - CDV = 68

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS 15165-B 376

DATE 5/19/93 SAMPLE UNIT 11 WB

SURVEYED BY RF AREA OF SAMPLE 182x10.5 = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	3	19	9			
QUANTITY & SEVERITY	63' x 9'	1.5' x 15'	168 L			
	7' x 15'	6' x 116'	14 M			
	7' x 116'	2 x 3'				
	9' x 56'	1 x 3'				
	91 x 32'	1 x 41				
		1.x 5'				
		1 x 26'				
TOTAL SEVERITY L	1464	167.5	168			
TOTAL SEVERITY M			14			
TOTAL SEVERITY H						

1176

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3	77	L	25
19	9	L	5
9	9	L	11
9	7	M	4
q=	TOTAL DEDUCT VALUE		45
	CORRECTED DEDUCT VALUE (CDV)		33

PCI = 100 - CDV = 67

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R+44 SECTION RS 15165-B

DATE 5/19/93 SAMPLE UNIT 13 W.B

SURVEYED BY RF AREA OF SAMPLE 192' x 10.5' = 1911

377

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

		TYPE →	3	1	9	19		
QUANTITY & SEVERITY			28' x 7'	1.5' x 28'	182' L	1X 17' M		
			7 x 154'	~~1.5 x 154'~~		2.5x26.5L		
				1.5 x 154'		2.5x66 L		
						1.5'x52L		
TOTAL SEVERITY	L		1274	273	182	309,25		
	M					17		
	H							

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3	67	L	23
1	14	L	37
9	10	L	12
19	116	L	7
19	9	M	8
q=	TOTAL DEDUCT VALUE		87
	CORRECTED DEDUCT VALUE (CDV)		45

PCI = 100 - CDV = 54

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS 15165-B 378

DATE 5/19/93 SAMPLE UNIT No WB

SURVEYED BY RF AREA OF SAMPLE 182x10.5 = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	1	3	15	7	9	
QUANTITY & SEVERITY		3'x182 L	3'x182 L	3'x182 L	5.5' L	141 L	
		2x182 L				41 M	
TOTAL SEVERITY	L	910	546	546	5.5	141	
	M					41	
	H						

weathering n/w Block cracking

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	48	L	49
3	29	L	15
19	29	L	9
7	3	L	2
9	7	L	9
9	2	M	6
q=	TOTAL DEDUCT VALUE		90
	CORRECTED DEDUCT VALUE (CDV)		47

PCI = 100 - CDV = 53

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

379

BRANCH R+44 SECTION RS 15165-B

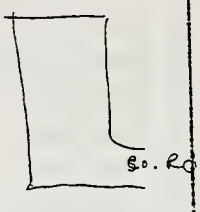
DATE 5/19/93 SAMPLE UNIT 18 & 3

SURVEYED BY RF AREA OF SAMPLE 182' x 10.5 = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



600 W

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

		TYPE →	10	3	1	9	19	
QUANTITY & SEVERITY			7' L	31 x 65' L	1.5 x 182'	6' H	3.5 x 71'	
				35' x 117' L	3' x 182'	73 M	4' x 30'	
						60 L	3.5' x 81'	
TOTAL SEVERITY	L		7	604.5	729.5	60	652	
	M					73		
	H					6		

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	.4	L	0
3	32	L	17
1	38	L	49
9	3	L	5
9	4	M	9
9	3	H	6
19	34	L	11
q=	TOTAL DEDUCT VALUE		97
	CORRECTED DEDUCT VALUE (CDV)		50

PCI = 100 - CDV = 50

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 44 SECTION RS 15165-B 380

DATE 5/19/93 SAMPLE UNIT 21 W.B

SURVEYED BY RF AREA OF SAMPLE 182' x 105' = 19110

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	3	7	1	9		
QUANTITY & SEVERITY	4.5' x 108	13' L	2.5' x 182'	9' M		
		21' L	21' x 182'	174' L		
			4' x 74'			
TOTAL SEVERITY L	486	15	1115	174		
TOTAL SEVERITY M				8		
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3	.25	L	15
7	.8	L	3
1	58	L	55
9	7	L	11
9	4	M	4
q=	TOTAL DEDUCT VALUE		88
	CORRECTED DEDUCT VALUE (CDV)		57

PCI = 100 - CDV = 43

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

2' x 4' water pumping through crack

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BRANCH Rt 44 SECTION RS 15165-B

DATE 5/19/93 SAMPLE UNIT 24 West 381

SURVEYED BY RF AREA OF SAMPLE 182' x 10.5' = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	9	7	1	3	15	19
QUANTITY & SEVERITY	7' M	10' L	180' x 2' L	6.5' x 182'	90 sf L	2' x 182'
	89' M	4.5' L				
TOTAL SEVERITY L		10.5	364	1183	90	364
M	89					
H	7					

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
9	5	H	11
9	4	H	16
7	6	L	8
1	19	L	40
3	62	L	77
15	5	L	21
19	19	L	35
q=	TOTAL DEDUCT VALUE		153
	CORRECTED DEDUCT VALUE (CDV)		72

PCI = 100 - CDV = 38

RATING = Poor

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

L 1-6

M 7-4

H >4

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BRANCH Rt 44 SECTION RS-15165-B 382

DATE 5/19/93 SAMPLE UNIT 1 EB

SURVEYED BY RF AREA OF SAMPLE 182 x 10.5' = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	1	19	3	9		
QUANTITY & SEVERITY		25 x 1	5 x 5	8 x 25	21 L		
		11.5 x 1.5	2 x 10	135 x 4.5	161 M		
		9.5 x 2	5 x 18'				
		2 x 1	2 x 22'				
		14 x 1					
TOTAL SEVERITY	L	77.25	179	807.5	21		
	M				161		
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	4	L	23
19	9	L	5
3	42	L	19
9	1	L	3
9	8	M	16
q=	TOTAL DEDUCT VALUE		66
	CORRECTED DEDUCT VALUE (CDV)		42

PCI = 100 - CDV = 58

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

Mile Marker 29 is 6'4" from ECL

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BRANCH Rt 44 SECTION RS-15165-B 383

DATE 5/19/93 SAMPLE UNIT 3 EB.

SURVEYED BY RF AREA OF SAMPLE 182 x 10.5' = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	9	19	3	1		
QUANTITY & SEVERITY		175 L	2x4 M	9'x182	1x1		
			2x182 L		1x1		
			3'x13'		1x1		
					1x.1		
					1.5x1		
TOTAL SEVERITY	L	175	411	1638	5.5		
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
9	9	L	11
19	22	L	8
3	86	L	36
1	3	L	5
q=	TOTAL DEDUCT VALUE		60
	CORRECTED DEDUCT VALUE (CDV)		38

PCI = 100 - CDV = 62

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS 15165-B 384

DATE 5/19/93 SAMPLE UNIT 6 EB

SURVEYED BY RF AREA OF SAMPLE 182 x 10.5' = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		3	19	9			
QUANTITY & SEVERITY		56 x 3.5	2' x 152'	36 L			
		9 x 126'		12 M			
				15 H			
TOTAL SEVERITY	L	1330	304	36			
	M			12			
	H			15			

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3	70	L	24
19	19	L	7
9	2	L	4
9	16	M	4
9	8	H	7
q=	TOTAL DEDUCT VALUE		46
	CORRECTED DEDUCT VALUE (CDV)		28

PCI = 100 - CDV = 72

RATING = VERY GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

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BRANCH Rt 44 SECTION RS 15165-B 385

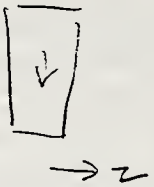
DATE 5/19/95 SAMPLE UNIT 9 EB

SURVEYED BY RF AREA OF SAMPLE 182 x 10.5' = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	19	* 3	9			
QUANTITY & SEVERITY		3 x 55'	~4.5 x 6.5	108 M			
		3.5 x 23'	182 x 9.5	27 H			
		3' x 36'		36 L			
		3' x 18'					
TOTAL SEVERITY	L	407.5	1699.75	36			
	M			27			
	H			108			

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	21	L	8
3	89	L	27
9	2	L	4
9	1	M	4
9	6	H	21
q= TOTAL DEDUCT VALUE			64
CORRECTED DEDUCT VALUE (CDV)			41

PCI = 100 - CDV = 59

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

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BRANCH Rt 44 SECTION RS 15165-B

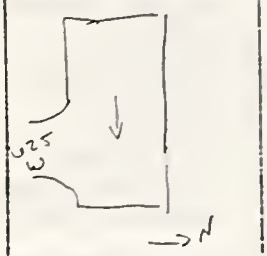
DATE 5/19/93 SAMPLE UNIT 11 E.B

SURVEYED BY RF AREA OF SAMPLE 182 x 10.5 = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

		TYPE → 1	3	19	9		
QUANTITY & SEVERITY		1.5 x 182'	6.5 x 182	2.5 x 152'	75 M		
				3' x 20'	49 L		
TOTAL SEVERITY	L	273	1183	440	49		
	M				75		
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	14	L	37
3	62	L	23
19	23	L	9
9	3	L	5
9	4	M	9
q=	TOTAL DEDUCT VALUE		83
	CORRECTED DEDUCT VALUE (CDV)		48

PCI = 100 - CDV = 52

RATING = FAIR

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

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BRANCH Rt 44 SECTION RS 15165-B

DATE 5/A/93 SAMPLE UNIT 13 EB

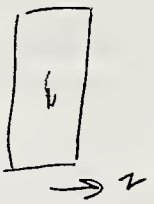
SURVEYED BY RF AREA OF SAMPLE 182 x 10.5 = 1911

387

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	3	9	19		
QUANTITY & SEVERITY	174.5 x 1.5	7' x 182'	182 M	5' x 16' L		
				41' x 156 L		
TOTAL SEVERITY L	261.75	1274		704		
TOTAL SEVERITY M			182			
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	14	L	37
3	67	L	23
9	10	M	19
19	37	L	11
q= TOTAL DEDUCT VALUE			90
CORRECTED DEDUCT VALUE (CDV)			52

PCI = 100 - CDV = 48

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS 15165-B 388

DATE 5/19/93 SAMPLE UNIT 16 E.B

SURVEYED BY RF AREA OF SAMPLE 182' x 10.5' = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	3	9	19		
QUANTITY & SEVERITY	1.5' x 182'	4.5' x 72'	129 L	2.5' x 182		
	2' x 182'	4' x 92	9 M			
TOTAL SEVERITY L	637	692	129	455		
TOTAL SEVERITY M			9			
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	33	L	47
3	36	L	17
9	7	L	9
9	.5	M	4
19	23	L	8
q=	TOTAL DEDUCT VALUE		85
	CORRECTED DEDUCT VALUE (CDV)		48

PCI = 100 - CDV = 52

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS 15165-B 389

DATE 5/19/93 SAMPLE UNIT 18 EB

SURVEYED BY RF AREA OF SAMPLE 182' x 10.5' = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	1	3	9	19		
QUANTITY & SEVERITY		182' x 2'	20' x 2'	105 L	22' x 2'		
		185' x 2.5	182' x 3.5'	66 M			
			17' x 7'	9 H			
TOTAL SEVERITY	L	736.5	796	105	44		
	M			66			
	H			9			

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	39	L	49
3	42	L	19
9	6	L	8
9	3	M	7
9	5	H	6
19	2	L	2
q=	TOTAL DEDUCT VALUE		91
	CORRECTED DEDUCT VALUE (CDV)		47

PCI = 100 - CDV = 51

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS 15165-B 390

DATE 5/19/93 SAMPLE UNIT 21 E.B

SURVEYED BY RF AREA OF SAMPLE 182' x 10.5' = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	3	1	9	19		
QUANTITY & SEVERITY	7'x122'	21x182'	167' L	6x3 L		
	[redacted]	21x [redacted] 60'	15' M	6x7 L		
	5'x62'			10'x2' L		
				12'x2' L		
TOTAL SEVERITY L	11164	488	167	74		
TOTAL SEVERITY M			15			
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3	61	L	22
1	26	L	44
9	9	L	11
9	8	M	4
19	4	L	3
q=	TOTAL DEDUCT VALUE		84
	CORRECTED DEDUCT VALUE (CDV)		53

PCI = 100 - CDV = 47

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 44 SECTION RS 15165-b

DATE 5/19/93 SAMPLE UNIT 24 E.B.

SURVEYED BY RF AREA OF SAMPLE 192' x 10.5 = 1911

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	3	1	19	9		
QUANTITY & SEVERITY	7.5' x 182' L	2' x 182' L	2' x 182' L	147' L		
				35' M		
TOTAL SEVERITY L	1365	364	364	147		
TOTAL SEVERITY M				35		
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3	71	L	23
1	19	L	41
19	19	L	7
9	8	L	10
9	2	M	6
q=	TOTAL DEDUCT VALUE		87
	CORRECTED DEDUCT VALUE (CDV)		45

PCI = 100 - CDV = 55

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R- 67 SECTION [illegible] - I

DATE 7 5 [illegible] SAMPLE UNIT 3

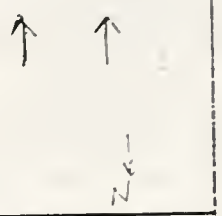
SURVEYED BY [illegible] AREA OF SAMPLE 109 x 24' = 2616 SF

392

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	7	10	15			
QUANTITY & SEVERITY		109 L	24 -	109 x 2 L			
		2 L	24 L	109 x 2 L			
		L	[illegible]				
			24				
			[illegible]				
			[illegible]				
			57				
TOTAL SEVERITY	L	125.5	274	436			
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	4.8	L	7
10	10.5	L	17
15	16.7	L	33
q=	TOTAL DEDUCT VALUE		57
	CORRECTED DEDUCT VALUE (CDV)		35.5

PCI = 100 - CDV = 64.5

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R & G-1 SECTION [illegible] 393

DATE 7/19/93 SAMPLE UNIT 10

SURVEYED BY [illegible] AREA OF SAMPLE 101 x 259 = 26165F

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	7	[illegible]	[illegible]	3	15	
QUANTITY & SEVERITY		80.5 L	[illegible] L	3 x 109 L	29 x 1.5 L	3 x 29 L	
		[illegible] L	[illegible] L	1 x 99 L			
		L	2.1 L	.5 x 99 L			
			2.1				
			27				
			114				
			54				
TOTAL SEVERITY	L	99	312	525.5	43.5	218	
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	3.8	L	6
10	11.9	L	18
19	20.1	L	7.5
3	1.7	L	1
15	8.3	L	25
q=	TOTAL DEDUCT VALUE		57.5
	CORRECTED DEDUCT VALUE (CDV)		31

PCI = 100 - CDV = 69

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

Ave 71.3

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623; the proponent agency is USACE

BRANCH _____ SECTION _____

DATE 7 15 [illegible] SAMPLE UNIT 17

SURVEYED BY _____ AREA OF SAMPLE _____ = 2616 SF

394

Distress Types		SKETCH:
1. Alligator Cracking	*10. Long & Trans Cracking	
2. Bleeding	11. Patching & Util Cut Patching	
3. Block Cracking	12. Polished Aggregate	
*4. Bumps and Sags	*13. Potholes	
5. Corrugation	14. Railroad Crossing	
6. Depression	15. Rutting	
*7. Edge Cracking	16. Shoving	
*8. Jt Reflection Cracking	17. Slippage Cracking	
*9. Lane/Shldr Drop Off	18. Swell	
	19. Weathering and Raveling	

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	7					
QUANTITY & SEVERITY		100.5 L	[illegible] L	[illegible] L			
			[illegible] L	[illegible] L			
			[illegible] L				
			[illegible] L				
			[illegible] L				
			[illegible] L				
			[illegible] L				
			[illegible] L				
			[illegible] L				
TOTAL SEVERITY	L	100.5	539	490.5			
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	3.8	L	6
10	20.6	L	24
19	18.8	L	7
q=	TOTAL DEDUCT VALUE		37
	CORRECTED DEDUCT VALUE (CDV)		22

PCI = 100 - CDV = 78

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH _____ SECTION _____ 395

DATE _____ SAMPLE UNIT _____

SURVEYED BY _____ AREA OF SAMPLE _____ = 2616 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		1.0			10	
QUANTITY & SEVERITY		2			13	
		11				
		20				
		30				
		1				
		1				
		1				
		1				
TOTAL SEVERITY L	109	377	24	33	13	
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	4.2	L	6
10	14.9	L	20.5
15	0.9	L	7
19	1.3	L	2
q= TOTAL DEDUCT VALUE			35.5
CORRECTED DEDUCT VALUE (CDV)			21

PCI = 100 − CDV = 69

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R-1 67 SECTION 15502 - I

DATE 7/15 1993 SAMPLE UNIT 32

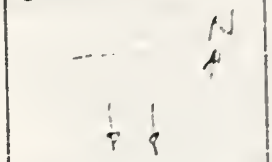
SURVEYED BY RF AREA OF SAMPLE 109 x 24 = 2616 SF

396

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	ID	7	19	15	3	
QUANTITY & SEVERITY	L	101	.5x109	20x2 L	15.5 VL	
	L	34				
	L					
	L					
	L					
	L					
	L					
	L					
	L					
TOTAL SEVERITY	L	457	135	54.5	40	62	
	M					
	H					

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	17.5	L	22
7	5.2	L	7
19	2.1	L	2
15	1.5	L	11
3	2.4	L	2
q= TOTAL DEDUCT VALUE			44
CORRECTED DEDUCT VALUE (CDV)			27

PCI = 100 - CDV = 73

RATING = very GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623; the proponent agency is USACE.

BRANCH RT 67 SECTION 15502-I

DATE 07/15/93 SAMPLE UNIT 40

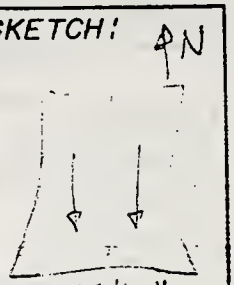
SURVEYED BY MF AREA OF SAMPLE 109x24 = 2616 SF

397

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	7	10	19	15		
QUANTITY & SEVERITY	82	84 L	23x2.5	34x2		
		119 L				
		71				
		17				
		24				
		90				
		80				
TOTAL	82	423	57.5	68		
SEVERITY L						
SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	3.1	L	5
10	16.2	L	21
19	2.2	L	2
15	2.6	L	15
q =	TOTAL DEDUCT VALUE		43
	CORRECTED DEDUCT VALUE (CDV)		32

PCI = 100 − CDV = 68

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rx 67 SECTION 15502 - J

DATE 7/15/93 SAMPLE UNIT 48

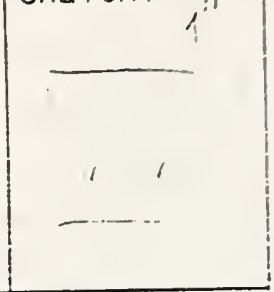
SURVEYED BY R.E AREA OF SAMPLE 109 x 24 = 2616 SF

398

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shaving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	7	10	19	15	
QUANTITY & SEVERITY	2 x 7.	99.5	102	1.5 x 109	35 x 2	
			109	2 x 2		
			14			
			7.5			
			75			
			4.5			
TOTAL SEVERITY L	6	97.5	220	167.5	50	
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	0.2	L	4
7	3.7	L	5.5
10	8.4	L	15
19	6.4	L	3.5
15	1.9	L	12.5
q=	TOTAL DEDUCT VALUE		40.5
	CORRECTED DEDUCT VALUE (CDV)		25

PCI = 100 - CDV = 75

RATING = very GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH RT67 SECTION 15202-I

DATE 07/15/93 SAMPLE UNIT 516

SURVEYED BY RF AREA OF SAMPLE 109x24 = 2616 SF

399

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	7	10	19				
QUANTITY & SEVERITY	109	109	109x2				
	35	12					
		12					
		24					
		81					
		66					
TOTAL SEVERITY L	145	298	80				
M							
H							

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	5.5	L	7.5
10	11.4	L	18
19	3.1	L	2.5
q=	TOTAL DEDUCT VALUE		28
	CORRECTED DEDUCT VALUE (CDV)		20.5

PCI = 100 - CDV = 79.5

RATING = very GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623; the proponent agency is USACE.

BRANCH R+W 67 SECTION 15102 - I

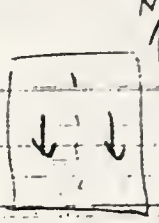
DATE 7/15/93 SAMPLE UNIT 64

SURVEYED BY KF AREA OF SAMPLE 109x24 = 2616 SF 400

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * JI Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE QUANTITY & SEVERITY

TYPE →	10	7	4	19	15
QUANTITY & SEVERITY	24	93.5	15x24	42x.5	15x2
	24	1.5			
	24				
	109				
	109				
	24				
	10				
TOTAL ITEM	684.5	95	360	21	30

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	100		17
24	26		5
7	4		1
4	100		45
19	100		6
15	100		8
	TOTAL DEDUCT VALUE		82
	CORRECTED DEDUCT VALUE (CDV)		21

PCI = 100 - CDV = 79

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE.

BRANCH Rt 67 SECTION 15502 · I

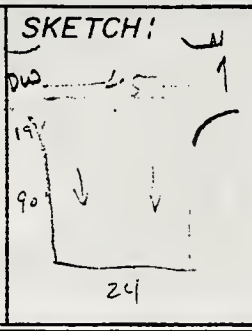
DATE 7/15/93 SAMPLE UNIT 72 401

SURVEYED BY RF AREA OF SAMPLE 109 x varies = 655.5 + 2160 = 2815.5

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	7	10	15	10		
QUANTITY & SEVERITY		69	109 L	100 x 2	24		
			109 L		40		
			30 L				
			~~22~~ 20				
			24				
			24				
			~~24~~ 20				
			~~20~~				
TOTAL SEVERITY	L	69	384	280	64		
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	2.5	L	4.5
10	159	L	21
15	100	L	27
q=	TOTAL DEDUCT VALUE		52.5
	CORRECTED DEDUCT VALUE (CDV)		38.5

PCI = 100 − CDV = 61.5

RATING = Good

* All Distresses Are Measured in Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured in Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623; the proponent agency is USACE.

BRANCH Rt 67 SECTION RS 15502 - I 402

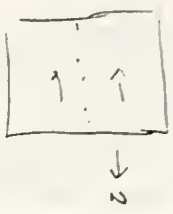
DATE 7/15/93 SAMPLE UNIT 80

SURVEYED BY RF AREA OF SAMPLE 109 x 24 = 2616 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Roveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	7	17	11	15	10
QUANTITY & SEVERITY	109	96	42x.5	3x24	60x2	19
	58		107x.5			10
	12					
	11					
	22					
	24					
	109					
	3.5					
	24					
TOTAL SEVERITY L	372.5	96	74.5	72	120	29
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	15.4	L	21
7	3.7	L	5.5
17	2.9	L	12
11	2.8	L	6
15	4.6	L	20
q= TOTAL DEDUCT VALUE			64.5
CORRECTED DEDUCT VALUE (CDV)			32

PCI = 100 - CDV = 68

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE.

BRANCH Rt 67 SECTION RS 15502 - ~~T~~ 403

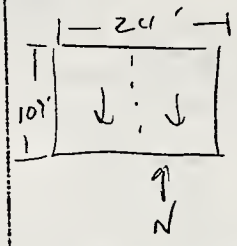
DATE 7/15/93 SAMPLE UNIT 88

SURVEYED BY RF AREA OF SAMPLE 109'x24' = 2616 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	7	19	15		
QUANTITY & SEVERITY		74 L	109	109 x 9	35 x 2		
		80 L					
		12 L					
		24					
		12					
		24					
		12					
		40					
		35					
TOTAL SEVERITY	L	313	109	981	70		
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	12.0	L	18.5
7	4.2	L	6
19	37.5	L	11
15	2.7	L	15
q=	TOTAL DEDUCT VALUE		50.5
	CORRECTED DEDUCT VALUE (CDV)		26.5

PCI = 100 - CDV = 73.5

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE.

BRANCH Rt 67 SECTION RS 15502 - I 404

DATE 7/15/93 SAMPLE UNIT 96

SURVEYED BY RF AREA OF SAMPLE 109 x 24' = 2616 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	7	19	15		
QUANTITY & SEVERITY	24	76.5	109 x 1.5	15 x 2		
	29					
	24					
	104					
	109					
	109					
	106					
	63					
	10					
TOTAL SEVERITY L	578	76.5	163.5	30		
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	22.1	L	25
7	2.9	L	5
19	6.3	L	3.5
15	1.2	L	9
q=	TOTAL DEDUCT VALUE		42.5
	CORRECTED DEDUCT VALUE (CDV)		31.5

PCI = 100 - CDV = 68.5

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 15 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE.

405

BRANCH Rt 37 SECTION RS 15630

DATE 7/15/93 SAMPLE UNIT 2 NB

SURVEYED BY RF, HH AREA OF SAMPLE 150 x 12' = 1800 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	7	9			
QUANTITY & SEVERITY		179'	49.5	1x1			
				1.5x14.5			
TOTAL SEVERITY	L	179	49.5	22.75			
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	9.9	L	16.5
7	2.8	L	5
9	1.3	L	2
q= 1.	TOTAL DEDUCT VALUE		23.5
	CORRECTED DEDUCT VALUE (CDV)		23.5

PCI = 100 - CDV = 76.5

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

Acc 84.41

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE.

BRANCH Rt 37 SECTION RS 15630 406

DATE 7/15/93 SAMPLE UNIT 4 WB

SURVEYED BY RF, HH AREA OF SAMPLE 150 x 12 = 1800 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	19				
QUANTITY & SEVERITY		179	1.5x137				
		12	3x150				
TOTAL SEVERITY	L	191	655.5				
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	10.6	L	17
19	36.4	L	11
q= 2	TOTAL DEDUCT VALUE		28
	CORRECTED DEDUCT VALUE (CDV)		20.5

PCI = 100 - CDV = 79.5

RATING = very good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 37 SECTION RS15630 407

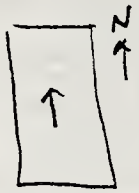
DATE 7/15/93 SAMPLE UNIT 6 NB

SURVEYED BY RF, HH AREA OF SAMPLE 150x12 = 1800 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	7	10	19				
QUANTITY & SEVERITY	108	99.5	2.5x150				
			1.5x68				
TOTAL SEVERITY L	108	99.5	477				
TOTAL SEVERITY M							
TOTAL SEVERITY H							

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	6.0	L	8
10	5.5	L	11.5
19	26.5	L	9
q= 3	TOTAL DEDUCT VALUE		28.5
	CORRECTED DEDUCT VALUE (CDV)		16

PCI = 100 − CDV = 84

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 37 SECTION RS 15630

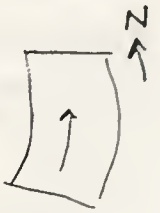
DATE 7/15/93 SAMPLE UNIT 8 NB 408

SURVEYED BY RF, HH AREA OF SAMPLE 150 x 12 = 1800 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	7	10	19			
QUANTITY & SEVERITY		14.5	91.5	2.5 x 150			
TOTAL SEVERITY	L	14.5	91.5	375			
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	.8	L	3
10	5.1	L	7
19	20.8	L	8
q= 2	TOTAL DEDUCT VALUE		18
	CORRECTED DEDUCT VALUE (CDV)		13

PCI = 100 - CDV = 87

RATING = Excellent

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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409

BRANCH Rt 37 SECTION RS 15630

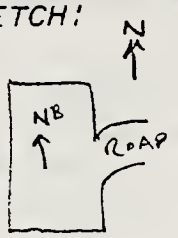
DATE 7/15/93 SAMPLE UNIT 11 NB

SURVEYED BY RF, HH AREA OF SAMPLE 150 x 12 = 1800 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Roveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	7	10	19			
QUANTITY & SEVERITY		7	72.5	2 x 150			
TOTAL SEVERITY	L	7	72.5	300			
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	0.4	L	2
10	4.0	L	9
19	16.7	L	7
q= 2	TOTAL DEDUCT VALUE		18
	CORRECTED DEDUCT VALUE (CDV)		13

PCI = 100 − CDV = 87

RATING = Excellent

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R+37 SECTION RS 15630 410

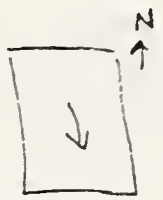
DATE 7/15/93 SAMPLE UNIT 11 SB

SURVEYED BY RF, HH AREA OF SAMPLE 150 x 12 = 1800 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	7					
QUANTITY & SEVERITY	150					
TOTAL SEVERITY L						
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	8.3	L	10
q=	TOTAL DEDUCT VALUE		10
	CORRECTED DEDUCT VALUE (CDV)		10

PCI = 100 - CDV = 90

RATING = Excellent

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH RT 37 SECTION RS 15630

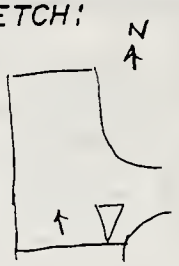
DATE 7/15/93 SAMPLE UNIT 2 NB 411

SURVEYED BY RF, HH AREA OF SAMPLE 164' x 11 = 1804 ft²

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	7				
QUANTITY & SEVERITY	207 L	79 L				
TOTAL SEVERITY L	207	79				
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	11.5	L	18
7	4.4	L	6.5

q= 2 TOTAL DEDUCT VALUE 24.5

CORRECTED DEDUCT VALUE (CDV) 18

PCI = 100 - CDV = 82

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R+37 SECTION RS15630

DATE 7/15/93 SAMPLE UNIT 5 UD

SURVEYED BY RF, HH AREA OF SAMPLE 164 X 11.5

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	7	19				
QUANTITY & SEVERITY	108	18 L	6.5 X 1				
	13						
TOTAL SEVERITY L	121	18	6.5				
TOTAL SEVERITY M							
TOTAL SEVERITY H							

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	6.7	L	13
7	1.0	L	3
19	.4	L	1
q= 1. TOTAL DEDUCT VALUE			17
CORRECTED DEDUCT VALUE (CDV)			17

PCI = 100 - CDV = 83

RATING = VERY GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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413

BRANCH R+56 SECTION RS15173

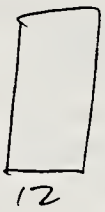
DATE 7/29/93 SAMPLE UNIT 1

SURVEYED BY John AREA OF SAMPLE 145 x 12 = 1740 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	12	7	10	9	15
QUANTITY & SEVERITY	145'L	9 sq 11/15 L	145'M	12'M	21'L	2'x 145' L
	130'L			5'L		
	12'M			10'M		
	4'M			12'M		
	21'L			3'M		
	10'L					
	21'L					
	9'M					
	10'M					
TOTAL SEVERITY L	290	1377.5		5	21	290
TOTAL SEVERITY M	35		145	37		
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	17.0	L	22
10	4.1	M	20
12	79.2	L	17
7	8.3	M	22
9	1.2	L	3
15	16.7	L	33
q= TOTAL DEDUCT VALUE			117
CORRECTED DEDUCT VALUE (CDV)			61

PCI = 100 − CDV = 39

RATING = Poor

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

A.C 4.9.1

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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414

BRANCH Rt 56 SECTION RS 15173/14

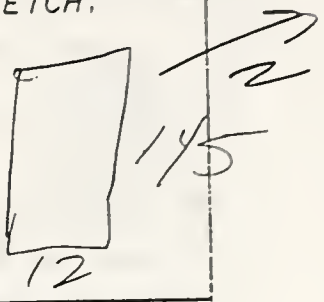
DATE 7/25/13 SAMPLE UNIT 14

SURVEYED BY SH AREA OF SAMPLE 12'x145' = 1740 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	12	7	9		
QUANTITY & SEVERITY		105'L	4.5 [illegible] L	145'M	D2'L		
		121'M		[illegible]			
		4'L		3.5L			
		9'L		2'L			
		3'L		2'L			
		145'L		1.5'L			
		121'M		4'L			
		3'L		4'M			
		4'L					
TOTAL SEVERITY	L	273	1377.5	13	102		
	M	24		149			
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	15.7	L	21
10	1.4	M	11
12	79.2	L	17
7	0.8	L	3
7	8.6	M	23
9	5.9	L	8
q=	TOTAL DEDUCT VALUE		83
	CORRECTED DEDUCT VALUE (CDV)		43

PCI = 100 - CDV = 57

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 56 | SECTION RS 15 173

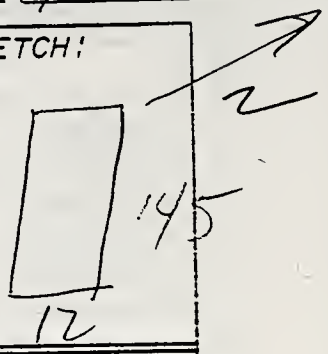
DATE 7/29/93 | SAMPLE UNIT 21

SURVEYED BY John | AREA OF SAMPLE 145X12 = 1740 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	12	10	10	9	15
QUANTITY & SEVERITY		12' L	9.5'+15' L	5' M	10' M	145' L	4'x145' L
		145' L		21' L	3' L		
		12' M		10' M	4' L		
		4' L		12' M	3' L		
		1.5 L		9' M			
		1.5 M		4' L			
		2' L		12' L			
		12' L		3' L			
		170' L		33' M			
TOTAL SEVERITY	L	296.5	1377.5	21	10	145	580
	M	13.5		33	10		
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	18.8	L	23
10	3.3	M	18
12	79.2	L	17
9	8.3	L	10
15	33.3	L	41
q=	TOTAL DEDUCT VALUE		109
	CORRECTED DEDUCT VALUE (CDV)		57

PCI = 100 − CDV = 43

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 56 SECTION AS 15173

DATE 9/7/25/93 SAMPLE UNIT 2B

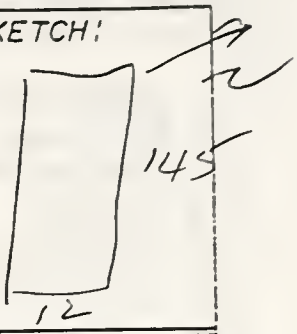
SURVEYED BY JOL AREA OF SAMPLE 145'x12'=1740 SF

416

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	12	10	10	15	9
QUANTITY & SEVERITY	12' M	9.5'x145' L	1' L	3' L	11'x145' L	42' L
	145' L		6' L	12' L		9' M
	18' L		12' L	12' M		
	8' L		12' L	12' L		
	11' M		1' L			
	2' L		11' M			
	3.5' L		1.9' L			
	12' L		3.5' L			
	1' L		12' L			
TOTAL SEVERITY L	189.5	1377.5	116.5	27	580	42
TOTAL SEVERITY M	23		11	12		9
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
16	19.1	L	83
10	12.6	M	15
12	77.2	L	17
15	3.3.3	L	41
9	2.4	L	4
9	0.5	M	4
q=	TOTAL DEDUCT VALUE		104
	CORRECTED DEDUCT VALUE (CDV)		59

PCI = 100 - CDV = 41

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R+56 SECTION RS 15173

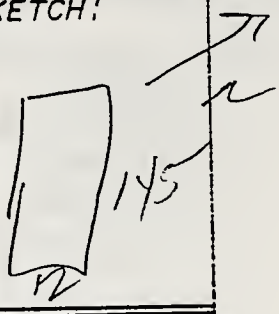
DATE 7/29/93 SAMPLE UNIT 35

SURVEYED BY John AREA OF SAMPLE 12 X 145 = 1740 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	12	7	12	9	15
QUANTITY & SEVERITY	12'M	9.5'×145'L	145'L	12'M	7'M	4'×145'L
	145'L			30'L	2'L	
	12'L			12'M		
	10'L			2'L		
	2'L			1'M		
	11'L					
	1.5'L					
	2'M					
	12'M					
TOTAL SEVERITY L	200.5	1377.5	145	51	2	580
TOTAL SEVERITY M	26			25	7	
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	14.5	L	21
10	29	M	17
12	79.2	L	17
7	8.3	L	10
9	0.1	L	2
9	0.4	M	4
15	33.3	L	41
q=	TOTAL DEDUCT VALUE		112
	CORRECTED DEDUCT VALUE (CDV)		58

PCI = 100 − CDV = 42

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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418

BRANCH RT 56
DATE 7/29/93
SURVEYED BY [illegible]

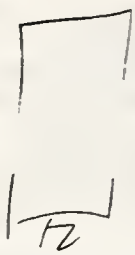
SECTION RS 15173
SAMPLE UNIT 4/2
AREA OF SAMPLE 145 SY

11 = 1740
2

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	12	10			
QUANTITY & SEVERITY	12' L	575' L	36' L			
	13' L		17' L			
	17' L		3' L			
	12' M		12' M			
	52' L					
	3' M					
	12' L					
	11' L					
	31' L					
TOTAL SEVERITY L	175	1377.5	51			
TOTAL SEVERITY M	15		12			
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	13.0	L	19
10	16.0	M	12
12	79.2	L	17
q=	TOTAL DEDUCT VALUE		48
	CORRECTED DEDUCT VALUE (CDV)		30

PCI = 100 - CDV = 70

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R+S6 SECTION RS 15173 419

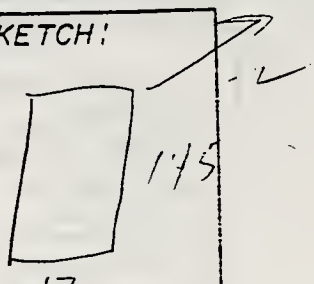
DATE 7/29/93 SAMPLE UNIT 49

SURVEYED BY JOM AREA OF SAMPLE 145 x 12 = 1740 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	12	4	9	10	
QUANTITY & SEVERITY	145' L	9.5' 115 L	12' M	18' L	3' L	
	100' L				12' L	
	9' L				3' L	
	2' L				4' L	
	1.5 L				12' L	
	5' L					
	2.5 L					
	4' L					
	1.5 L					
TOTAL SEVERITY L	273.5	1377.5		18	34	
TOTAL SEVERITY M			12			
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	.177	L	22
12	.792	L	17
4	0.7	M	20
9	1.0	L	3
q= TOTAL DEDUCT VALUE			62
CORRECTED DEDUCT VALUE (CDV)			39

PCI = 100 − CDV = 61

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R+56 SECTION R315173

DATE 7/29/93 SAMPLE UNIT 56

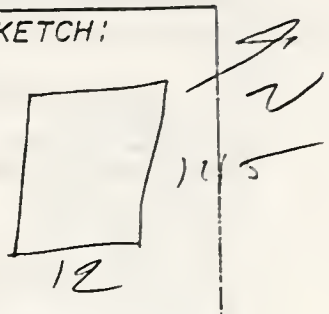
SURVEYED BY JL AREA OF SAMPLE 145 X 12 = 1740SF

420

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	12	15	7	9	
QUANTITY & SEVERITY	140'L	9.5 x 145 L	4 x 145 L	27'L	21'M	
	140'L				124'H	
	140'L					
	7'L					
	3'L					
	10'L					
	6'L					
	12'L					
TOTAL SEVERITY L	.463	1377.5	580	27		
TOTAL SEVERITY M					21	
TOTAL SEVERITY H					124	

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	26.6	L	27
12	75.2	L	17
15	33.3	L	41
7	1.6	L	3
9	1.2	M	5
9	7.1	H	24
q=	TOTAL DEDUCT VALUE		117
	CORRECTED DEDUCT VALUE (CDV)		67

PCI = 100 - CDV = 33

RATING = Poor

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 56 SECTION RS 15173

DATE 7/29/93 SAMPLE UNIT 63

SURVEYED BY JR AREA OF SAMPLE 145 x 12 = 1740 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	12	10	13	9	
QUANTITY & SEVERITY	145' L	6.5 x 145 L	3' L	145 x 4 L	72' L	
	145' L		3' L			
	3' L		4' L			
	12' L		3' L			
	3' L					
	3' L					
	3' L					
	12' L					
	3' L					
TOTAL SEVERITY L	329	1377.5	13	580	72	
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	19.7	L	23
12	79.2	L	17
15	33.3	L	41
9	4.1	L	16
q=	TOTAL DEDUCT VALUE		87
	CORRECTED DEDUCT VALUE (CDV)		50

PCI = 100 - CDV = 50

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 56 SECTION RS 15173 422

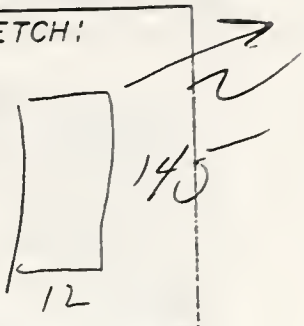
DATE 7/21/93 SAMPLE UNIT 70

SURVEYED BY JOH AREA OF SAMPLE 12 X 145 = 1740 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	9	10	15	12	10
QUANTITY & SEVERITY	10	145' L 145' L 9' L 9' L 12' L 12' L 9' L 12' L 9' L	580 L	9.5' 145' L 1377.5	9' L 9
TOTAL SEVERITY L	10	362	580	1377.5	9
TOTAL SEVERITY M					
TOTAL SEVERITY H					

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
9	0.6	L	2
10	21.3	L	25
15	33.3	L	41
12	79.2	L	17
q= TOTAL DEDUCT VALUE			85
CORRECTED DEDUCT VALUE (CDV)			54

PCI = 100 - CDV = 46

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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423

BRANCH Rt 56 SECTION RS 15173

DATE 7/24/97 SAMPLE UNIT 77

SURVEYED BY JH AREA OF SAMPLE 12V 145

= 1740 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	9	15	12		
QUANTITY & SEVERITY	145' L	145' L	4 x 145 L	9.5 x 145 L		
	12' L					
	12' L					
	12' L					
	12' L					
	12' L					
	9' L					
TOTAL SEVERITY L	214	145	580	1377.5		
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	12.3	L	19
9	8.3	L	10
15	33.3	L	41
12	79.2	L	17
q=	TOTAL DEDUCT VALUE		87
	CORRECTED DEDUCT VALUE (CDV)		50

PCI = 100 - CDV = 50

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH RT 56 SECTION RS15173 424

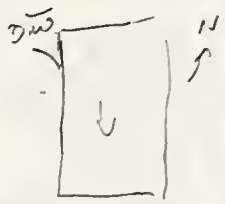
DATE SAMPLE UNIT 84

SURVEYED BY AREA OF SAMPLE 145 X 12 = 1740 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	12	10	10	9	15	
QUANTITY & SEVERITY	9.5 x 145	12	12 L	121 L	4 x 145	
		12 M	7 L			
		22 L				
		12				
		12 M				
		5 L				
		6 L				
		12 M				
		39 L				
TOTAL SEVERITY L	1377.5	96	19	121	580	
TOTAL SEVERITY M		36				
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
12	79.2	L	17
10	6.6	L	13
10	2.1	M	14
9	7.0	L	9
15	33.3	L	41
q=	TOTAL DEDUCT VALUE		94
	CORRECTED DEDUCT VALUE (CDV)		49

PCI = 100 - CDV = 51

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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425

BRANCH RT 56 SECTION RS 15173

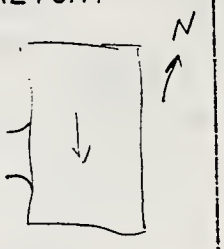
DATE 7/27/93 SAMPLE UNIT 91

SURVEYED BY KF + TH AREA OF SAMPLE 145' X 12 = 1740 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	12	9	10	15	10	7
QUANTITY & SEVERITY		9.5 x 145 L	82 L	9	4 x 145 L	22 L	101
				141		12 M	
				3			
				12 M			
				10 M			
				12			
				22 M			
				12 M			
				10 L			
TOTAL SEVERITY	L	1377.5	82	175	580	22	101
	M			56		12	
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
12	79.2	L	17
9	4.7	L	7
10	11.3	L	18
10	2.9	M	19
15	33.3	L	41
7	5.8	L	8
q=	TOTAL DEDUCT VALUE		110
	CORRECTED DEDUCT VALUE (CDV)		54

PCI = 100 - CDV = 46

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

6116 ... Mr. ... 10 frames

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH SR 241 SECTION RS 15174-A 426

DATE 7/28/93 SAMPLE UNIT 4

SURVEYED BY RF, JH AREA OF SAMPLE 135 x 11 = 1485 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	19	10	9	10	1
QUANTITY & SEVERITY	7	135x2 M	11	65 L	11	4x2
	10	135x9 L	14		6	3x3
	13		11 M			2x3
	11		6.5			2x3
	17		11			1x14
	22		11			2x1
	7		5			
	5		11			
	11		6			
TOTAL SEVERITY L	103	1215	75.5	65	17	45
M		270	11			
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	13.2	L	19
10	0.7	M	7
19	81.8	L	15
19	18.2	M	23.5
9	4.4	L	6.5
1	3.0	L	20
q= TOTAL DEDUCT VALUE			91
CORRECTED DEDUCT VALUE (CDV)			44

PCI = 100 - CDV = 56

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH SR 241 SECTION RS 15174-A

DATE 7/28/93 SAMPLE UNIT 8

SURVEYED BY RF, JH AREA OF SAMPLE 135 x 11 = 1485 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	19	9	10	10	
QUANTITY & SEVERITY		12	1x33 M	135	11	7	
		11	1452 L		12.5	7	
		11			6	6.5	
		10			5.5	4	
		11			11		
		5			22		
		11 M			6		
		12			5		
		5			7		
TOTAL SEVERITY	L	77	1452	135	86	24.5	
	M	11	33				
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	12.6	L	19
10	0.7	M	6.5
19	97.8	L	16
19	2.2	M	10
9	9.1	L	11
q=	TOTAL DEDUCT VALUE		62.5
	CORRECTED DEDUCT VALUE (CDV)		31

PCI = 100 - CDV = 69

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623; the proponent agency is USACE.

BRANCH SR 241 SECTION RS 15174-A

DATE 7/28/93 SAMPLE UNIT 11

SURVEYED BY RC, JH AREA OF SAMPLE 135 x 11

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	19	10	3	9	1	
QUANTITY & SEVERITY	11x135	8	10x3	50 L	35x2	
		11			9x2	
		11				
		11 M				
		11				
		11 M				
		11				
		11				
TOTAL SEVERITY L	1485	63	30	50	88	
M		22				
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	100.0	L	16.5
10	4.2	L	9
10	1.5	M	11.5
3	2.0	L	1
9	3.4	L	5
1	5.9	L	27
q=	TOTAL DEDUCT VALUE		70
	CORRECTED DEDUCT VALUE (CDV)		39

PCI = 100 - CDV = 61

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE.

BRANCH SR 241 SECTION RS 15174-A

DATE 7/28/93 SAMPLE UNIT 14

SURVEYED BY RF / JH AREA OF SAMPLE 135 X 11 = 1485

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		19	10	1	9	10	7
QUANTITY & SEVERITY		11 x 135	11	4x5	46 L	9	94.5 L
			11M	4x5	37 L	6	
			4			6	
			8			11M	
			11			11M	
			2			11M	
			7				
			11M				
			11				
TOTAL SEVERITY	L	1485	54	40	83	21	94.5
	M		22			33	
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	100.0	L	16.5
10	5.1	L	11
10	3.7	M	19
1	2.7	L	19
9	5.6	L	7.5
7	6.4	L	8.5
q=	TOTAL DEDUCT VALUE		81.5
	CORRECTED DEDUCT VALUE (CDV)		39

PCI = 100 - CDV = 61

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH SC 241 SECTION RS 15174-A 430

DATE 7/28/93 SAMPLE UNIT 18

SURVEYED BY RF, JH AREA OF SAMPLE 135 x 11 = 1485 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. J1 Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	19	12	9	1	10	
QUANTITY & SEVERITY	11x135	11 M	20 L	17x1	15	
		3		35x4.5	11	
		9		1x20	17	
		5			16	
		11 M			4	
		4			4	
		7			5.5	
		11				
		22				
TOTAL SEVERITY L	1485	160	20	194.5	72.5	
M		22				
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	100.0	L	16.5
10	9.3	L	16
10	1.5	M	11.5
9	1.4	L	3
1	13.1	L	36
q=	TOTAL DEDUCT VALUE		83
	CORRECTED DEDUCT VALUE (CDV)		47

PCI = 100 - CDV = 53

RATING = FAIR

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH SR 241 SECTION RS 15 174-A 431

DATE 7/28/93 SAMPLE UNIT 21

SURVEYED BY RF, JH AREA OF SAMPLE 135 X 11 = 1485 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	19	10	9	1	10	
QUANTITY & SEVERITY		11X135	11	36 L	2X135	11	
			11	31 L		11	
			11.5				
			3				
			13				
			12				
			3				
			11				
			9				
TOTAL SEVERITY	L	1485	84.5	47	270	22	
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	100.0	L	16.5
10	7.2	L	14
9	4.5	L	6.5
1	18.2	L	40
q=	TOTAL DEDUCT VALUE		77
	CORRECTED DEDUCT VALUE (CDV)		44

PCI = 100 - CDV = 56

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE.

BRANCH Rt 241 SECTION RS 15174-A 432

DATE 7/28/93 SAMPLE UNIT 25

SURVEYED BY RF, JH AREA OF SAMPLE 135 x 11 = 1485 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE. QUANTITY & SEVERITY

TYPE →	10	12	19	1		
QUANTITY & SEVERITY	11	11	11x135	8x38.5		
	7	5.5		1 x14		
	11	3.5				
	54	7				
	17	11 M				
	6	3				
	11	11 M				
	7					
	9					
TOTAL SEVERITY L	133	30	1485	322		
TOTAL SEVERITY M		22				
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	11.0	L	17.5
10	1.5	M	11.5
19	100.0	L	16.5
1	21.7	L	42
q=	TOTAL DEDUCT VALUE		87.5
	CORRECTED DEDUCT VALUE (CDV)		50

PCI = 100 - CDV = 50

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 241 SECTION RS 15174-A 433

DATE 7/28/93 SAMPLE UNIT 28

SURVEYED BY RF, JH AREA OF SAMPLE 135 X 11 = 1485 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	19	1	10	9		
QUANTITY & SEVERITY		6x56	5x56 M	11	20 L		
		11x79	1.5x70 L	11	41 M		
				22			
				22			
				14			
				22			
				11			
				5			
				5			
TOTAL SEVERITY	L	1205	105	123	20		
	M		280		41		
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	81.2	L	16.5
1	7.1	L	29
1	18.9	M	54.5
10	8.3	L	15
9	1.4	L	3
9	2.8	M	7
q=	TOTAL DEDUCT VALUE		125
	CORRECTED DEDUCT VALUE (CDV)		65

PCI = 100 - CDV = 35

RATING = Poor

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured in Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 241 SECTION RS15174-A 434

DATE 7/28/93 SAMPLE UNIT 32

SURVEYED BY RF, JH AREA OF SAMPLE 135x11 = 1485 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	19	10	10	1	9	7	3
QUANTITY & SEVERITY	11x135	4	5	4x6	2 H	22	5x10
		6	11	3x5	6 L		
		5.5	12	18x8			
		4	23	2x3			
		18	3.5				
		11					
		18					
		24					
		11					
TOTAL SEVERITY L	1485	101.5	54.5	189	6	22	50
M							
H					2		

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	100.0	L	16.5
10	1.05	L	17
1	12.7	L	35
9	0.4	L	2
9	0.1	H	6
7	1.5	L	3.5
3	3.4	L	3
q=	TOTAL DEDUCT VALUE		83
	CORRECTED DEDUCT VALUE (CDV)		47

PCI = 100 - CDV = 53

RATING = FAIR

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 241 SECTION RS15174-A

DATE 2/25/93 SAMPLE UNIT 36

SURVEYED BY RF, JH AREA OF SAMPLE 135 x 11 = 1485 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	19	10	1	10	9	
QUANTITY & SEVERITY	11x135 L	6	4x9	11	49 H	
		9	2x74	9		
		8	7.5x23	9		
		5		9.5		
		11		6		
		12		14		
		5		8.5		
		9				
		11				
TOTAL SEVERITY L	1485	76	356.5	107		
M						
H					49	

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	100.0	L	16.5
10	9.6	L	16
1	24.0	L	43
9	3.3	H	14
q=	TOTAL DEDUCT VALUE		89.5
	CORRECTED DEDUCT VALUE (CDV)		51

PCI = 100 - CDV = 49

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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436

BRANCH Rt 241 SECTION 15174-A

DATE 7/28/93 SAMPLE UNIT 40

SURVEYED BY _____ AREA OF SAMPLE 135 x 11 = 1485 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	9	19	3	10	1	
QUANTITY & SEVERITY		26 H	4 X 53.5 H	4 X 29	6	3 X 81.5	
		56.5 M	7 X 53.5 L		6		
					16		
					11		
					11		
					11		
					11 M		
					5		
					4+7		
TOTAL SEVERITY	L		374.5	116	77	244.5	
	M	56.5			11		
	H	26	214				

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
9	3.8	H	9
9	1.8	H	9
19	25.2	L	9
19	14.4	H	50
3	7.8	L	7
10	5.2	L	11
10	0.7	M	7
q=	TOTAL DEDUCT VALUE		141
	CORRECTED DEDUCT VALUE (CDV)		67

PCI = 100 - CDV = 33

RATING = Poor

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

1 | 16.5 | L | 39

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R + Z41 SECTION RS 15174 - A 437

DATE 7/28/93 SAMPLE UNIT 43

SURVEYED BY _____ AREA OF SAMPLE 11X135 = 1485 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	19	10	1	10		
QUANTITY & SEVERITY	11X135	7	2X 135	3		
		11		6		
		29		17.5		
		5		3		
		11		11.5		
		14		3.5		
		7		3		
		10				
		7				
TOTAL SEVERITY L	1485	101	270	47.5		
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	100.0	L	16.5
10	10.0	L	17
1	18.2	L	40
q= TOTAL DEDUCT VALUE			73.5
CORRECTED DEDUCT VALUE (CDV)			47

PCI = 100 - CDV = 53

RATING = FAIR

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH 741 SECTION RS15174-B 438

DATE 7/28/93 SAMPLE UNIT 2

SURVEYED BY RF, JH AREA OF SAMPLE 150 x 11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	19	1	16	9	10
QUANTITY & SEVERITY	11	7 x 21.5	4 x 21.5	715	18L	11M
	11	11 x 128.5	1 x 11.5	16		10
	11		1 x 26.5	16		
	4			7		
	8.5			11		
	11			7		
	7			14		
	11			11M		
	11			3		
TOTAL SEVERITY L	85.5	1564	124	75.5	18	10
M				11		11
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	10.4	L	20
10	1.3	M	11
19	94.8	L	16
1	7.5	L	29
9	1.1	L	3
q= TOTAL DEDUCT VALUE			79
CORRECTED DEDUCT VALUE (CDV)			45

PCI = 100 - CDV = 55

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH 241 SECTION RS15174-B 439

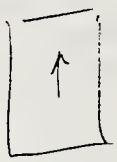
DATE 7/28/93 SAMPLE UNIT 7

SURVEYED BY RF, JH AREA OF SAMPLE 150 X 11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	19	10	7	1	10	10
QUANTITY & SEVERITY	9.5 x 150	7	143	2.5 x 150	11	7
		4			10.5	10.5
		11			7	3
		4			14	10
		7			11M	
		7			23	
		7			9	
		10			7.5	
		10			7.5	
TOTAL SEVERITY L	1425	74	143	375	85.5	22.5
M					11	
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	86.4	L	15
10	11.0	L	17
10	0.7	M	7
7	8.7	L	11
1	22.7	L	43
q=	TOTAL DEDUCT VALUE		93
	CORRECTED DEDUCT VALUE (CDV)		47

PCI = 100 - CDV = 53

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 241 SECTION RS 15174-B 440

DATE 7/28/93 SAMPLE UNIT 12

SURVEYED BY RF, JH AREA OF SAMPLE 150x11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shaving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	19	10	10	9			
QUANTITY & SEVERITY	11x150	11 M	11.5	17.5			
		3	11	18 L			
		4	16 M				
		140	11				
		11	9				
		14	10				
		10					
		11					
		11 M					
TOTAL SEVERITY L	16.50	189	48.5	35.5			
TOTAL SEVERITY M		22	16				
TOTAL SEVERITY H							

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	100	L	16.5
10	14.4	L	20
10	2.3	M	15
9	22	L	4
q=	TOTAL DEDUCT VALUE		55.5
	CORRECTED DEDUCT VALUE (CDV)		35

PCI = 100 - CDV = 65

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R+ 241 SECTION RS15174-B 441

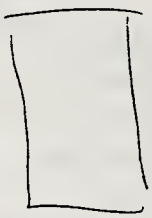
DATE 7/28/93 SAMPLE UNIT 17

SURVEYED BY RF, JH AREA OF SAMPLE 150 x 11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	19	1	10	7	
QUANTITY & SEVERITY	11 M	7 x 25	9 x 25	7.5	47.5 L	
	12 M	11 x 12.5	11.5 x 25.5	11 M		
	11 M		4 x 11.5	7		
	7		35 x 67	11		
	11			4		
	10			4		
	11 M					
	7.5					
	8					
TOTAL SEVERITY L	39.5	1550	495.25	33.5	47.5	
TOTAL SEVERITY M	45			11		
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	4.4	L	10
10	3.4	M	18
19	9 3.9	L	16
1	30.0	L	46
7	2.9	L	5
q=	TOTAL DEDUCT VALUE		95
	CORRECTED DEDUCT VALUE (CDV)		54

PCI = 100 - CDV = 46

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH RT 241 SECTION RS15174-B 442

DATE 7/28/93 SAMPLE UNIT 22

SURVEYED BY RF, JH AREA OF SAMPLE 150x11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	1	10	19	10		
QUANTITY & SEVERITY		8x52.5	18	3x525	11M		
			11	11x7.5'			
			11				
			11				
			10.5				
			11				
			11				
			11M				
			4M				
TOTAL SEVERITY	L	420	83.5	1492.5			
	M		15		11		
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	25.5	L	44
10	5.1	L	11
10	1.10	M	12
19	90.5	L	16
q=	TOTAL DEDUCT VALUE		83
	CORRECTED DEDUCT VALUE (CDV)		47

PCI = 100 - CDV = 53

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 241 SECTION RS 15174 - B

DATE 7/28/93 SAMPLE UNIT 27

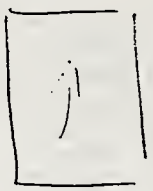
SURVEYED BY RF, JH AREA OF SAMPLE 150x11 = 1650SF

443

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	19	9	10	1	10	
QUANTITY & SEVERITY	11X150	32M	4	7X6	5	
		118L	11M		11	
			11			
			11			
			97			
			5			
			3.5			
			7.5			
			11M			
TOTAL SEVERITY L	1650	118	139	42	16	
TOTAL SEVERITY M		32	22			
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	100	L	16.5
9	3.2	L	9
9	1.9	M	5
10	9.4	L	16
10	1.3	M	11
1	2.0	L	19
q= TOTAL DEDUCT VALUE			76.5
CORRECTED DEDUCT VALUE (CDV)			39

PCI = 100 - CDV = 61

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623; the proponent agency is USACE

444

BRANCH Rt 241 SECTION RS 15174-B

DATE 7/28/93 SAMPLE UNIT 32

SURVEYED BY RF, JH AREA OF SAMPLE 150x11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	19	9	3	1	10
QUANTITY & SEVERITY	3	11x150	150 L	29x3.5	1x3	11
	17			3.5x18 M	4x11	7
	11				4x59	7.5
	11 M				3x6	1 M
	22				4x8.5	
	7 M				1.5x38	
	9					
	11					
	11					
TOTAL SEVERITY L	84	1650	150	101.5	392	25.5
M	18			63		1
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	16.6	L	13
10	1.2	M	10
19	100	L	16.5
9	9.1	L	11
3	6.2	L	5
3	3.8	M	9
1	23.8	L	43
q=	TOTAL DEDUCT VALUE		107.5
	CORRECTED DEDUCT VALUE (CDV)		52

PCI = 100 - CDV = 48

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH n-241 SECTION RS 15174-B 445

DATE 7/28/93 SAMPLE UNIT 37

SURVEYED BY RF, SH AREA OF SAMPLE 150X11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	19	7	3	1	10
QUANTITY & SEVERITY		30	11X150	141.5	7.5X6	3X2	7
		11 M				3.5X38	7
		6				11X2	7.5
		6				1X2	11 M
		6					
		11					
		8					
		13					
		5					
TOTAL SEVERITY	L	85	1650	141.5	45	163	21.5
	M	11					11
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	6.5	L	13
10	1.3	M	11
19	100	L	16.5
7	8.6	L	10
3	2.7	L	2.5
1	99	L	33
q=	TOTAL DEDUCT VALUE		86
	CORRECTED DEDUCT VALUE (CDV)		44

PCI = 100 - CDV = 56

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the management agency is USACE

BRANCH Rt 241 SECTION RS15174-B 446

DATE 7/28/93 SAMPLE UNIT 42

SURVEYED BY RF, JH AREA OF SAMPLE 150 x 11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	19	9	3	1	10
QUANTITY & SEVERITY	11 M	11 X 150	150 L	2.5 x 4	1.5 x 10	11
	3			4 x 12	7 x 5	11 M
	17					
	11					
	53					
	14					
	9					
	11 M					
	6					
TOTAL SEVERITY L	113	1650	150	58	30	11
M	22					11
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	7.5	L	14
10	2.0	M	13
19	100	L	16.5
9	9.1	L	11
3	3.5	L	3
1	3.0	L	20
q=	TOTAL DEDUCT VALUE		77.5
	CORRECTED DEDUCT VALUE (CDV)		39

PCI = 100 - CDV = 61

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623. the proponent agency is USACE

BRANCH R+ 241 SECTION RS15174-B 447

DATE 7/28/93 SAMPLE UNIT 47

SURVEYED BY RF AREA OF SAMPLE 150 x 11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	3	19	9	1	10
QUANTITY & SEVERITY	161	11 x 78	11 X 156	52	5 X 24	11
	11				3 X 2	13
	11				2 x 3	
	11					
	11					
	11					
	13					
	7					
	16					
TOTAL SEVERITY L	97	858	1650	52	182	24
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	7.3	L	14
3	52.0	L	21
19	100	L	16.5
9	3.2	L	5
1	30	L	30
q= TOTAL DEDUCT VALUE			86.5
CORRECTED DEDUCT VALUE (CDV)			50

PCI = 100 - CDV = 50

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 241 SECTION NS 15174 - B 448

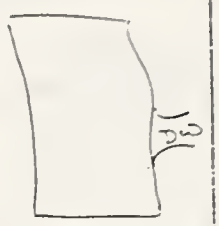
DATE 7/28/93 SAMPLE UNIT 52

SURVEYED BY RF, JH AREA OF SAMPLE 150 x 11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	19	10	1	3	9	
QUANTITY & SEVERITY		150 x 11	15	4 x 49	11 x 26	11.5 L	
			11	11 x 8			
			7	3 x 18 M			
			7				
			9.5				
			9				
			11 M				
TOTAL SEVERITY	L	1650	58.5	284	286	11.5	
	M		11	54			
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
19	100	L	16.5
10	3.6	L	8.5
10	0.7	M	7
1	17.2	L	39
3	17.3	L	12
9	0.7	L	2
1	3.3	M	33.5
q=	TOTAL DEDUCT VALUE		118.5
	CORRECTED DEDUCT VALUE (CDV)		58

PCI = 100 - CDV = 42

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

449

BRANCH Rt 241 SECTION RS15174-B

DATE 7/28/93 SAMPLE UNIT 57

SURVEYED BY RF, JH AREA OF SAMPLE 150x11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	19	1	10		
QUANTITY & SEVERITY	50	11x150	3x4	11 M		
	7		100x1.5	11		
	11 M			11		
	11 M			5		
	5			11 M		
	7					
	11					
	11 M					
	11 M					
TOTAL SEVERITY L	82	1650	162	27		
TOTAL SEVERITY M	44			22		
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	6.6	L	13
10	4.0	M	20
19	100	L	16.5
1	9.8	L	33
q=	TOTAL DEDUCT VALUE		82.5
	CORRECTED DEDUCT VALUE (CDV)		47

PCI = 100 - CDV = 53

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 241 SECTION RS15174 - B 450

DATE 7/28/93 SAMPLE UNIT 62

SURVEYED BY RF, JH AREA OF SAMPLE 150X11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	19	7	3	1	10
QUANTITY & SEVERITY	11	11x150	150	15.5x6	65x2	17
	1 M					9
	37					11 M
	11					16
	4					
	7					
	11					
	7					
	11					
TOTAL SEVERITY L	99	1650	150	93	130	27
M	11					11
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	7.6	L	14
10	1.3	M	11
19	100	L	16.5
7	9.1	L	11
3	5.6	L	5
1	7.9	L	30
q=	TOTAL DEDUCT VALUE		87.5
	CORRECTED DEDUCT VALUE (CDV)		45

PCI = 100 - CDV = 55

RATING = Fair

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R+ D'11 SECTION RS 15174 - B 451

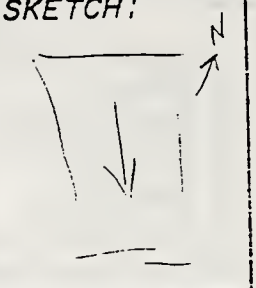
DATE 9/28/93 SAMPLE UNIT 67

SURVEYED BY RF, JH AREA OF SAMPLE 150 X 11 = 1650 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	15	1	9	10	19	10
QUANTITY & SEVERITY	7X3	7X3	7	150	10x150	11
		1X33.5		11		11
		3.5x7.5		11		
				9		
				8		
				11		
				12		
				8		
				11		
TOTAL SEVERITY L	21	80.75	7	232	1500	22
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
15	1.3	L	9
1	4.9	L	25
9	0.4	L	2
10	15.4	L	21
19	90.9	L	16
q= TOTAL DEDUCT VALUE			73
CORRECTED DEDUCT VALUE (CDV)			41

PCI = 100 - CDV = 59

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

SB lane

NB

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

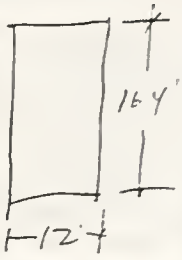
BRANCH R15309 -A
DATE 5/18/93
SURVEYED BY [illegible]

SECTION SB R+3 452
SAMPLE UNIT 7
AREA OF SAMPLE 164' x 12' = 1968 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1				
QUANTITY & SEVERITY	31 L	10 L				
	8.5 L	11 L				
	8.5 L	21 L				
	6' L	9 L				
	7' L	66 L				
	5' L	12 L				
TOTAL SEVERITY L	43	129				
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	2.2	L	5
1	.660	L	28
q=	TOTAL DEDUCT VALUE		33
	CORRECTED DEDUCT VALUE (CDV)		33

PCI = 100 - CDV = 67

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

453

BRANCH R15309-A SECTION SB Rt 3

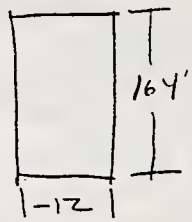
DATE 5/18/93 SAMPLE UNIT 10

SURVEYED BY JR AREA OF SAMPLE 164 x 12 = 1968 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	10	11		
QUANTITY & SEVERITY	9' L	12 L	7.5' L	24 L		
	9' L	90 L				
	1' L	9 L				
	8' L					
	8' L					
	3' L					
	8.5 L					
	8.5 L					
	9' L					
TOTAL SEVERITY L	73.5	111		24		
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	3.6	L	8
1	5.6	L	27
11	1.2	L	3
q=	TOTAL DEDUCT VALUE		38
	CORRECTED DEDUCT VALUE (CDV)		28

PCI = 100 - CDV = 72

RATING = very GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R-3 15309-A SECTION SB RT 3

DATE 5/18/93 SAMPLE UNIT 13

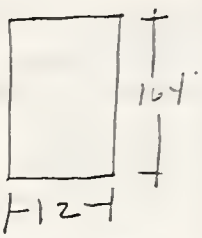
SURVEYED BY JOL AREA OF SAMPLE 164 x 12 = 1968 sq

454

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Carrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1				
QUANTITY & SEVERITY	91 L	12 L				
	91 L	9 L				
	31 L	9 L				
	91 L	164 L				
	91 L	12 L				
	2.5 L	12 L				
		12 L				
		9 L				
TOTAL SEVERITY L	41.5	239				
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	2.1	L	5
1	1.21	L	35
q=	TOTAL DEDUCT VALUE		40
	CORRECTED DEDUCT VALUE (CDV)		40

PCI = 100 - CDV = 60

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rd 3 15309-A SECTION SB Rt 3 455

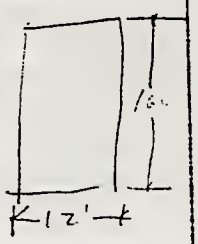
DATE 5/18/93 SAMPLE UNIT 16

SURVEYED BY JH AREA OF SAMPLE 164' x 12' = 1968 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1				
QUANTITY & SEVERITY	91' L	12 L				
	4' L	12 L				
	26' L	12 L				
	21' L	12 L				
	9' L	12 L				
	3' L					
	12' L					
	91' L					
	12'					
TOTAL SEVERITY L	105	60				
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	5.3	L	11
1	3.1	L	20
q=	TOTAL DEDUCT VALUE		31
	CORRECTED DEDUCT VALUE (CDV)		23

PCI = 100 - CDV = 77

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 3 15309-A SECTION SB Rt 3

DATE 5/13/93 SAMPLE UNIT 19

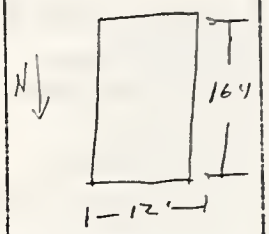
SURVEYED BY Joh AREA OF SAMPLE 164' x 12' = 1968 sq

456

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1				
QUANTITY & SEVERITY	12' L	3 L				
	7' L	12 L				
	122' L	17 L				
	9' L	4 L				
	9' L					
	8' L					
TOTAL SEVERITY L	165	36				
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	85	L	14
1	1.66	L	14
q=	TOTAL DEDUCT VALUE		28
	CORRECTED DEDUCT VALUE (CDV)		21

PCI = 100 - CDV = 79

RATING = very good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

457

BRANCH R+S 153.091-A SECTION SB RT3

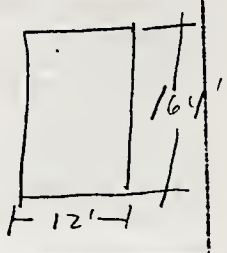
DATE 5/18/93 SAMPLE UNIT 22

SURVEYED BY lck AREA OF SAMPLE 164' X 12' = 1968 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	1	10	10			
QUANTITY & SEVERITY		27 L	12' L	11.5' L			
			3' L	3' L			
			12' L	12' L			
			15' L				
			3.5' L				
			8.5' L				
			21' L				
			8' L				
			2.5' L				
TOTAL SEVERITY	L	27	118				
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	1.4	L	13
10	6.0	L	12
q=	TOTAL DEDUCT VALUE		25
	CORRECTED DEDUCT VALUE (CDV)		18

PCI = 100 − CDV = 82

RATING = very GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH RW3 15309-A SECTION SB Rt 3 458

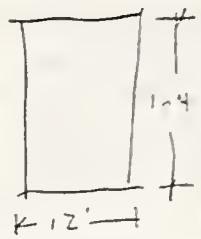
DATE 5/18/93 SAMPLE UNIT 25

SURVEYED BY JdL AREA OF SAMPLE 164 x 12' = 1968 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	10				
QUANTITY & SEVERITY	4 L	5' L				
	4.5 L	5' L				
	7 L	9' L				
	55 L	8' L				
	3 L	8' L				
	2 L	12' L				
	8 L	8.5' L				
	42 L	9' L				
TOTAL SEVERITY L	125.5	54.5				
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	6.4	L	28
10	3.3	L	8
q=	TOTAL DEDUCT VALUE		36
	CORRECTED DEDUCT VALUE (CDV)		~~30~~ 28

PCI = 100 - CDV = 72

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

459

BRANCH CE 15309-A SECTION SB Rt 3

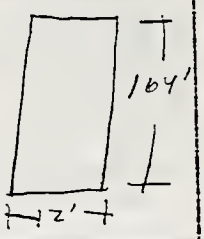
DATE 5/18/93 SAMPLE UNIT 28

SURVEYED BY JoLn AREA OF SAMPLE 164'x12' = 1968 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	10			
QUANTITY & SEVERITY	3 L	6.25 L	10' L			
	9.5' L					
	12' L					
	8' L					
	9' L					
	6' L					
	9.5 L					
	5' L					
	4' L					
TOTAL SEVERITY L	76	6.25				
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	39	L	9
1	0.3	L	5
q=	TOTAL DEDUCT VALUE		14
	CORRECTED DEDUCT VALUE (CDV)		14

PCI = 100 - CDV = 86

RATING = Excellent

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623; the proponent agency is USACE

BRANCH R+3 15369-A
DATE 5/18/93
SURVEYED BY John

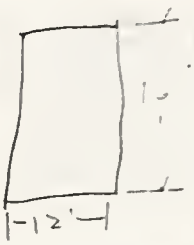
SECTION SB R+3
SAMPLE UNIT 31
AREA OF SAMPLE 12 x 12 = 1968 sq

460

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	9	1	10		
QUANTITY & SEVERITY	12' L	.5"	7 L	10' L		
	7' L			6.5' L		
	9' L					
	9' L					
	12' L					
	9' L					
	9' L					
	7.5 L					
	9' L					
TOTAL SEVERITY L	.107		7			
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	5.2	L	11
1	.04	L	6
q=	TOTAL DEDUCT VALUE		17
	CORRECTED DEDUCT VALUE (CDV)		12

PCI = 100 - CDV = 88

RATING = Excellent

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

461

BRANCH R+3 15309-A SECTION SB R+3

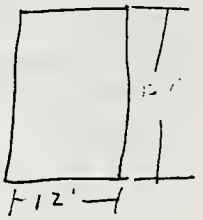
DATE 5/18/83 SAMPLE UNIT 34

SURVEYED BY Hdz AREA OF SAMPLE 164'X12' = 1968 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE		10	10				
QUANTITY & SEVERITY		10' L	2.5' L				
		12' L	6' L				
		12' L	4' L				
		2.5' L	5' L				
		6' L					
		2.5 L					
		12' L					
		3' L					
		3.5 L					
TOTAL SEVERITY	L	81					
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	4.1	L	9
q=	TOTAL DEDUCT VALUE		9
	CORRECTED DEDUCT VALUE (CDV)		9

PCI = 100 − CDV = 91

RATING = Excellent

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

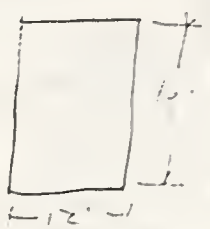
BRANCH R+3
DATE 5/18/93
SURVEYED BY John

SECTION SB 15309-A 462
SAMPLE UNIT 37
AREA OF SAMPLE 164' x 12' = 1968 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	10	1				
QUANTITY & SEVERITY	91 L	12' L	1.5 L				
	12' L	8.5' L					
	12' L	10.5 L					
	9' L						
	12' L						
	1' L						
	12' L						
	12' L						
	9' L						
TOTAL SEVERITY L	207		1.5				
TOTAL SEVERITY M							
TOTAL SEVERITY H							

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	10.5	L	21
1	0.1	L	4
q=	TOTAL DEDUCT VALUE		25
	CORRECTED DEDUCT VALUE (CDV)		25

PCI = 100 - CDV = 75

RATING = very good

*All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH K-1 E
DATE 5/18/93
SURVEYED BY J.L.

SECTION SB 1 463A
SAMPLE UNIT 40
AREA OF SAMPLE 164' x 12' = 1968 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	11				
QUANTITY & SEVERITY	9' L	1.5 L	144 L				
	12' L	7 M					
	9.5' L						
	9' L						
	2.75' L						
	5' L						
	12' L						
	8' L						
	12' L						
TOTAL SEVERITY L	79.25	1.5	144				
TOTAL SEVERITY M		7					
TOTAL SEVERITY H							

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	40	L	9
1	0.1	L	4
1	0.1	M	7
11	73	L	13
q=	TOTAL DEDUCT VALUE		33
	CORRECTED DEDUCT VALUE (CDV)		19

PCI = 100 - CDV = 81

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R 15309 - A SECTION RT 3 464

DATE 5/18/93 SAMPLE UNIT 7 NB

SURVEYED BY RF AREA OF SAMPLE 164 x 12 = 1968 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	10	10			
QUANTITY & SEVERITY	75'x1.5'	12'	191			
	3x1.5'	8.5'	12'			
	3x1.5'	1'	10.5'			
	1x2'	8.5'	12'			
		9'	6'			
		3.5'	5'			
		9.				
		5'				
		10				
TOTAL SEVERITY L	123.5	132				
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	6.3	L	27
10	6.3	L	13
q=	TOTAL DEDUCT VALUE		40
	CORRECTED DEDUCT VALUE (CDV)		39

PCI = 100 - CDV = 61

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH RT 3 SECTION R15309-A 465

DATE 5/18/93 SAMPLE UNIT 10 NB

SURVEYED BY RF AREA OF SAMPLE 164 x 12 = 1968 ft²

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	10			
QUANTITY & SEVERITY	8.5'	1 x 3'	11'			
	12'	1 x 2'	10'			
	12'	1.5' x 2.5'	11'			
	8'	1.5 x 3	9'			
	8'	14' x 1'				
	8'	2' x 3'				
	4'	2' x 1.5'				
	8'	9' x 1'				
	8'					
TOTAL SEVERITY L	117.5	15.25				
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	6.0	L	12
1	7.3	L	17
q= TOTAL DEDUCT VALUE			29
CORRECTED DEDUCT VALUE (CDV)			21

PCI = 100 − CDV = 79

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Q-3 SECTION R15309-A 466

DATE 5/18/93 SAMPLE UNIT 13 NB

SURVEYED BY RF AREA OF SAMPLE 164 x 12' = 1968 ft²

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	1	10	10			
QUANTITY & SEVERITY		15.5 x 1	9'	7'			
		3' x 1.5'	8'	11'			
		3' x 1'	9'	6'			
		2' x 1'	5'	3'			
		3' x 1.5'	9'	10'			
			18'	12'			
			12'				
			8'				
			12'				
TOTAL SEVERITY	L	70.5	129				
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	1.5	L	14
10	7.01	L	13
q=	TOTAL DEDUCT VALUE		27
	CORRECTED DEDUCT VALUE (CDV)		20

PCI = 100 - CDV = 80

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH RT 3 SECTION I-309-A 467

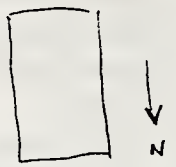
DATE 5/18/93 SAMPLE UNIT 16 NB

SURVEYED BY RF AREA OF SAMPLE 164 X 12 = 1968 ft²

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	1	10'			
QUANTITY & SEVERITY		15'	1'x3'	5'			
		9'	1'x2'	12'			
		9.5'	1'x4'	8'			
		9'	12'x1.5'	8.5'			
		11'	3'x1'				
		9'	1'x3'				
		2'	1'x2'				
		1'	21'x1'				
		10'					
TOTAL SEVERITY	L	109	67				
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	5.5	L	11
1	3.2	L	21
q=	TOTAL DEDUCT VALUE		32
	CORRECTED DEDUCT VALUE (CDV)		23

PCI = 100 − CDV = 77

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH RT 3 SECTION R15309-A NB468

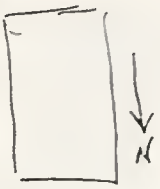
DATE 5/18/93 SAMPLE UNIT 19

SURVEYED BY RF AREA OF SAMPLE 164 X 12 = 1968 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		1	10				
QUANTITY & SEVERITY		5'x1'	8.5'				
		4x2'	8'				
		2.5'x1'	10'				
		7.5' x 1'	3'				
		3' x 1.5'	12				
		2' x 1'	12'				
			45'				
			9'				
			9'				
TOTAL SEVERITY	L	4.5	118.5				
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	3.3	L	21
10	59	L	12
q=	TOTAL DEDUCT VALUE		33
	CORRECTED DEDUCT VALUE (CDV)		24

PCI = 100 - CDV = 76

RATING = VERY GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R-3 SECTION 121309-A 469

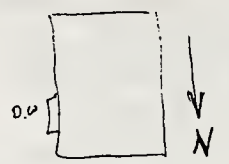
DATE 5/18/93 SAMPLE UNIT 22 NB

SURVEYED BY CR AREA OF SAMPLE 164' x 12' = 1968 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		1	10	10			
QUANTITY & SEVERITY		23.5'x1' L	8.5'	5.5'			
		2'x1' L	5.5'	6'			
		3'x1.5'	41	12'			
		3'x1'	12'				
		11.5'x1	8.5'				
		# 15 L	7.5'				
		1x2	10'				
		2.5'x1	7.5'				
			12'				
TOTAL SEVERITY	L	50	99				
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	2.5	L	18
10	5.0	L	11
q=	TOTAL DEDUCT VALUE		29
	CORRECTED DEDUCT VALUE (CDV)		21

PCI = 100 - CDV = 79

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH [illegible] SECTION [illegible]-A

DATE 5/18/93 SAMPLE UNIT 25 NB470

SURVEYED BY RF AREA OF SAMPLE 164x12 = 1968

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1				
QUANTITY & SEVERITY	31	2'x1.5'				
	8.5'	2'x1.5'				
	8'	10 SF M				
	35'	2 SF L				
	12'	1'x1.5'				
	9'	1'x 1'				
	2'	3'x1'				
	41	2'x1				
		2'x1				
TOTAL SEVERITY L	5.0	1.5				
TOTAL SEVERITY M		1.0				
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	25	L	6
1	.09	L	10
1	0.5	M	15
q=	TOTAL DEDUCT VALUE		31
	CORRECTED DEDUCT VALUE (CDV)		18

PCI = 100 - CDV = 82

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

Begin Bridge at Spider marker SG+89

ASPHALT PAVEMENT INSPECTION SHEET

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471

BRANCH C-3 SECTION 15309-A

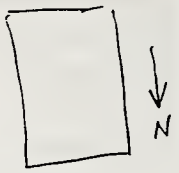
DATE 5/18/93 SAMPLE UNIT 28

SURVEYED BY RLF AREA OF SAMPLE 12 x 12 = 1968 sq

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	10			
QUANTITY & SEVERITY	2'	8'	50'			
	3'	2 SF	4'			
	6'	4 SF	2.5'			
	5'	4'x1.5'	8.5'			
	8'		7'			
	4'					
	1'					
	8'					
	8'					
TOTAL SEVERITY L	117	20				
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	6.0	L	12
1	1.0	L	11
q=	TOTAL DEDUCT VALUE		23
	CORRECTED DEDUCT VALUE (CDV)		17

PCI = 100 - CDV = 83

RATING = very good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

30
29
164

23'3"
141
200'

mile marker 87 is 23'3" from section 30 start

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH L-1 3 SECTION R15309-A 472

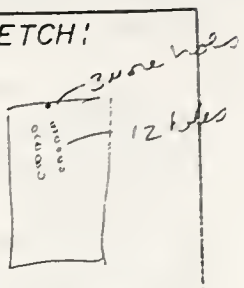
DATE 5/18/93 SAMPLE UNIT 31 NB

SURVEYED BY RF AREA OF SAMPLE 1,968 SY

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		10	1	10			
QUANTITY & SEVERITY		10'	1.5 SF	9'			
		9'	4 SF	8.5'			
		10'	109 x 1.5'				
		5'	2 SF				
		10'	2 SF				
		6'	2 SF				
		9'	10 SF				
		12'	10 SF				
		4'	4 SF				
TOTAL SEVERITY	L	92.5	196				
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	4.7	L	11
1	10.0	L	33
q=	TOTAL DEDUCT VALUE		44
	CORRECTED DEDUCT VALUE (CDV)		32

PCI = 100 - CDV = 68

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

overlay thickness 3/4"

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R-1 E SECTION R 15.39-A 473

DATE 5/18/93 SAMPLE UNIT 34 NB

SURVEYED BY [illegible] AREA OF SAMPLE [illegible] = 4685 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	10				
QUANTITY & SEVERITY	109'x1.5'	9'				
	4'	2.5'				
		1'				
		9'				
		8'				
		4'				
		12'				
		2.5				
		6'				
TOTAL SEVERITY L	750	54				
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	12.7	L	35
10	2.7	L	6
q=	TOTAL DEDUCT VALUE		41
	CORRECTED DEDUCT VALUE (CDV)		~~20~~ 35

PCI = 100 - CDV = 65

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R-3 SECTION C15-09-A

DATE 5/18/93 SAMPLE UNIT 37 118

SURVEYED BY RF AREA OF SAMPLE 20'x98' = 1968 sf

474

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	10			
QUANTITY & SEVERITY	8.5'	118' x 15'	10'			
	12'	2 SF	5'			
	12'	2 SF	12'			
	10'	4 SF	9.5'			
	12'	6 SF				
	12'	17 SF				
	9'					
	11'					
	10'					
TOTAL SEVERITY L	147	203				
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	7.5	L	14
1	10.3	L	36
q= TOTAL DEDUCT VALUE			50
CORRECTED DEDUCT VALUE (CDV)			37

PCI = 100 - CDV = 63

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH A1 3 SECTION 15359-A 475

DATE 5/18/93 SAMPLE UNIT 40

SURVEYED BY RF AREA OF SAMPLE 164' x 12' = 1968 sq

NB

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	ID	1	10	11		
QUANTITY & SEVERITY	2'	~~5~~ 6	9.5'	12.5'x12'		
	~~5~~ 11'	6	11'			
	5'	~~105~~ 105'	10'			
	5'	12'	12'			
	13'	21				
	12'					
	10'					
	6'					
	5'					
TOTAL SEVERITY L	111.5	131		24.5		
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	5.7	L	12
1	6.7	L	28
11	1.3	L	3
q=	TOTAL DEDUCT VALUE		43
	CORRECTED DEDUCT VALUE (CDV)		32

PCI = 100 - CDV = 68

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

R15309.2

BRANCH RT 3 SECTION 25+70 - NB 476

DATE 5/18/93 SAMPLE UNIT 2

SURVEYED BY RF AREA OF SAMPLE 164' X 12' = 1968

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	1	10	19		
QUANTITY & SEVERITY		3 L	3 L	2.3' L	85 SF L		
		12' L	6 L	4.5' L	19 L		
		6' L	30 L				
		12' L					
		9' L					
		9.5' L					
		11' L					
		9' L					
		7' L					
TOTAL SEVERITY	L	70.5	39		27		
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	3.16	L	8
1	20	L	16
19	1.4	L	2
q=	TOTAL DEDUCT VALUE		26
	CORRECTED DEDUCT VALUE (CDV)		18

PCI = 100 - CDV = 82

RATING = very good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

JB

BRANCH RT 3 SECTION R 15309-E 477

DATE 5/18/93 SAMPLE UNIT 5

SURVEYED BY RF AREA OF SAMPLE 164' x 12 = 1968

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	1	19	10		
QUANTITY & SEVERITY		12' L	3 L		4' L		
		5' L	2 L		3.5' L		
		5.5' L	3 L		3' L		
		1' L	4 L				
		30' L					
		5' L					
		12' L					
		1' L					
		11' L					
TOTAL SEVERITY	L	92	12				
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	4.7	L	11
1	.046	L	8
q=	TOTAL DEDUCT VALUE		19
	CORRECTED DEDUCT VALUE (CDV)		14

PCI = 100 - CDV = 86

RATING = Excellent

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH RT3 SECTION R 15309-E

DATE 5/18/93 SAMPLE UNIT 8

SURVEYED BY RF AREA OF SAMPLE 164 X 12 = 1968

478

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	18			
QUANTITY & SEVERITY	164'	164' x 1.5' L	12'			
	8'	2 x 2 L	10'			
	8'	25 SF L	12'			
	9'	- 20 SF	4 spalls			
	8'	- 20 SF				
	9'	- 24 SF				
	1.5'	2 SF				
	10'	2 SF				
	9.5'					
TOTAL SEVERITY L	37	122				
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	4.9	L	11
1	9.8	L	33
q=	TOTAL DEDUCT VALUE		44
	CORRECTED DEDUCT VALUE (CDV)		~~32~~ 33

PCI = 100 - CDV = 67

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

NB

BRANCH RT 3 — SECTION R 15309-E — 479

DATE 5/18/93 — SAMPLE UNIT 14

SURVEYED BY RF — AREA OF SAMPLE 164'x12' =1968

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	10				
QUANTITY & SEVERITY	1601 L	7'				
		1'				
		9.5'				
		8'				
		12'				
		6'				
TOTAL SEVERITY L	1600	43.5				
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	8.1	L	30
10	2.2	L	5
q=	TOTAL DEDUCT VALUE		35
	CORRECTED DEDUCT VALUE (CDV)		35

PCI = 100 − CDV = 65

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R+3 SECTION R 15309-E 480

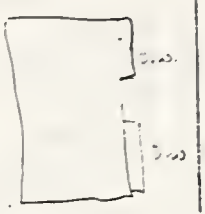
DATE 5/18/93 SAMPLE UNIT 11

SURVEYED BY KF AREA OF SAMPLE 164 X 12 = 1968

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	1	19			
QUANTITY & SEVERITY		9'	2 L	64 SF L			
		10'	2 L				
		18'	2 L				
		10'					
		12'					
		11'					
		3'					
		9'					
		12					
TOTAL SEVERITY	L	24	6	64			
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	4.8	L	11
1	9.3	L	5
19	3.3	L	3
q=	TOTAL DEDUCT VALUE		19
	CORRECTED DEDUCT VALUE (CDV)		19

PCI = 100 - CDV = 81

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

NB

BRANCH R+3 SECTION R15309-E 481

DATE 5/18/93 SAMPLE UNIT 17

SURVEYED BY RF AREA OF SAMPLE 164 x 12 = 1968

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1				
QUANTITY & SEVERITY	9.5' L	3 L				
	12'					
	7.5'					
	9'					
	12'					
	8.5'					
	12'					
	12'					
	12'					
TOTAL SEVERITY L	94.5	3				
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	4.8	L	11
1	0.2	L	4
q=	TOTAL DEDUCT VALUE		15
	CORRECTED DEDUCT VALUE (CDV)		15

PCI = 100 - CDV = 85

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 3 SECTION R 15309 - E 482

DATE 5/18/93 SAMPLE UNIT 20

SURVEYED BY RF AREA OF SAMPLE 164 x 12 = 1968

NB

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shaving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	10				
QUANTITY & SEVERITY	10' L	12' L				
	10 L	12' L				
	4 L	1 M				
		12 L				
		12 L				
		12 L				
		12 L				
TOTAL SEVERITY L	24	72				
M		1				
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	12	L	12
10	3.7	L	9
10	0.1	M	0
q=	TOTAL DEDUCT VALUE		21
	CORRECTED DEDUCT VALUE (CDV)		15

PCI = 100 - CDV = 85

RATING = very GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 3 SECTION R 15309 -E

DATE 5/18/93 SAMPLE UNIT 26

SURVEYED BY RF AREA OF SAMPLE 164 x 12 = 1968

483

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1				
QUANTITY & SEVERITY	12'	12 L				
	5.5'	164 L				
	7.5'	8 L				
	6'	10 L				
	9'					
	9'					
	9'					
	9'					
	9'					
TOTAL SEVERITY L	716	194				
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	39	L	9
1	99	L	33
q=	TOTAL DEDUCT VALUE		42
	CORRECTED DEDUCT VALUE (CDV)		~~37~~ 33

PCI = 100 - CDV = 67

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Pothales.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 3 SECTION R 15309-E 484

DATE 5/18/93 SAMPLE UNIT 32

SURVEYED BY RC AREA OF SAMPLE 164 x 12 = 1968

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		10	1	10			
QUANTITY & SEVERITY	2'		164 L	10 L			
	12'		4 L	10 L			
	4.5'		4 L	6 L			
	9'		2 L	XX			
	9'						
	12'						
	3.5'						
	12'						
	12'						
TOTAL SEVERITY	L	102	174				
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	5.2	L	11
1	8.8	L	31
q=	TOTAL DEDUCT VALUE		42
	CORRECTED DEDUCT VALUE (CDV)		31

PCI = 100 - CDV = 69

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH RT 3 SECTION R15309-E 485

DATE 5/18/93 SAMPLE UNIT 23

NO SURVEYED BY RF AREA OF SAMPLE 164 x 12 = 1968

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	1	10	11		
QUANTITY & SEVERITY		12' L	4 L	12	9.5' x 12'		
		1 L	2 L	2'			
		12' L	6 L	1.5'			
		12'		6.5'			
		12'					
		12'					
		12'					
		1'					
		12'					
TOTAL SEVERITY	L	108	12		114		
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	5.5	L	11
1	0.6	L	7
11	5.8	L	11
q=	TOTAL DEDUCT VALUE		29
	CORRECTED DEDUCT VALUE (CDV)		17

PCI = 100 - CDV = 83

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

5/8" overlay — Is this [illegible] ? actual 3/8

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 3 SECTION R 15309 - E 486

DATE 5/18/93 SAMPLE UNIT 29

SURVEYED BY RF AREA OF SAMPLE 164 x 12 = 1968

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	10	10			
QUANTITY & SEVERITY	20 L	12'	12'			
	6 L	4.5'				
		7'				
		6.5'				
		8.5'				
		12'				
		12'				
		7'				
		9'				
TOTAL SEVERITY L	7.6	20.5				
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	1.3	L	13
10	4.6	L	10
q=	TOTAL DEDUCT VALUE		23
	CORRECTED DEDUCT VALUE (CDV)		17

PCI = 100 - CDV = 83

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

Overlay depth 1/2"

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 3 SECTION R 15309-E 487

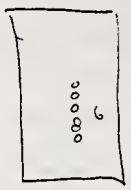
DATE 5/18/93 SAMPLE UNIT 35

SURVEYED BY RF AREA OF SAMPLE 164 x 12 = 1968

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	10			
QUANTITY & SEVERITY	12'	6 L	9'			
	9'	164	12'			
	9'	18				
	6'	2 L				
	6'					
	8.5'					
	9.5'					
	9.5'					
	2'					
TOTAL SEVERITY L	9.5	10.0				
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	4.7	L	10.5
1	9.7	L	32
q= TOTAL DEDUCT VALUE			42.5
CORRECTED DEDUCT VALUE (CDV)			~~32~~ 32

PCI = 100 - CDV = 68

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH 2+3 SECTION R15309-E 488

DATE 5/18/93 SAMPLE UNIT 38

SURVEYED BY RC AREA OF SAMPLE 164 x 12 = 1968

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	1	10			
QUANTITY & SEVERITY		7	164' x 1.5'	12'			
		8'	12 x 1'	9'			
		8'					
		9'					
		9'					
		9'					
		9'					
		9'					
		12'					
TOTAL SEVERITY	L	101	255				
	M						
	H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	5.1	L	11
1	13.1	L	36
q=	TOTAL DEDUCT VALUE		47
	CORRECTED DEDUCT VALUE (CDV)		35 36

PCI = 100 - CDV = 64

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH R+ 234 SECTION RS 15617-A 489

DATE _____ SAMPLE UNIT _____

SURVEYED BY RF, GO AREA OF SAMPLE 70 x 10 = 2100 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	12	3	7	19
QUANTITY & SEVERITY	10.5	1 x 7 =	10.5	28 L	143 L	25, 1 M
	7	1 x 7 =	12			175 x 1 L
	10.5	1 x 4	4			9 x 200 L
	25					
	10.5					
	4					
	10.5					
	39					
	10.5					
TOTAL SEVERITY L	127.5	10.5	36.5	28	143 L	975
M						25
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	7.8	L	14.5
1	10.5	L	10.5
9	1.3	L	3
7	6.8	L	9
19	94.1	L	16
19	1.2	M	9
q=	TOTAL DEDUCT VALUE		58
	CORRECTED DEDUCT VALUE (CDV)		28

PCI = 100 - CDV = 72

RATING = Very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

1300 + 131 = 1431 from 1480

Section Shortened due to ship Scale + Bridge construction

PCI = 9.4

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 234 SECTION RS 15617-A

DATE _____ SAMPLE UNIT 4

SURVEYED BY _____ AREA OF SAMPLE 200 × 10.5 = 2100 SF

490

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
4. * Bumps and Sags
5. Corrugation
6. Depression
7. * Edge Cracking
8. * Jt Reflection Cracking
9. * Lane/Shldr Drop Off
10. * Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
13. * Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	9	17	14	7	1
QUANTITY & SEVERITY		76	34 M	115	191 × 2 L	2 M	
		10.5	7 L	21	9 × 2 M	60 M	
		10.5	9 L	9.5	188 × 3 L	77 M	
		27	12 M		3 × 12 M	42 M	
		10.5	75 L		5 × 300 L	62 L	
		5	30 M				
		7.5	9 M				
		10.5	13 L				
		8					
TOTAL SEVERITY	L	152	51	42	1946	62	142.5
	M		76		54	75	
	H		9			63	

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	9.2	L	16
9	2.4	L	4
9	3.6	M	8.5
9	0.4	H	6
19	92.7	L	16
19	2.6	M	10.5
7	3.0	L	5
q=	TOTAL DEDUCT VALUE		133
	CORRECTED DEDUCT VALUE (CDV)		64

PCI = 100 − CDV = 36

RATING = Poor

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

7	3.6	M	15.5
7	3.0	H	23
1	4.8	L	28.5

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 234 SECTION RS 15619-A 491

DATE _____ SAMPLE UNIT 8

SURVEYED BY RF AREA OF SAMPLE 200 x 10.5 = 2100 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	9	10	1	7	19
QUANTITY & SEVERITY	10.5	18 M	14.5	1 x 3 L	82 L	3.3 x 2.5 M
	11	37 L	15.5			177 x 2.5 L
	13	90 L	77			6 x 200 L
	10.5		10.5			
	19		2			
	10.5					
	30					
	10.5					
	31.5					
TOTAL SEVERITY L	175.5	77	64.5	3	82	1642.5
M		18				57.5
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	11.4	L	18
9	3.7	L	5.5
9	0.9	M	4
1	0.1	L	4
7	3.9	L	6
19	78.2	L	15
19	2.7	M	10.5
q=	TOTAL DEDUCT VALUE		63
	CORRECTED DEDUCT VALUE (CDV)		31

PCI = 100 - CDV = 69

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623. The proponent agency is USACE

BRANCH Rt 234 SECTION RS 15617-A 492

DATE _____ SAMPLE UNIT 12

SURVEYED BY CF AREA OF SAMPLE 100 x 21 = 2100 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	9	10	19	7	
QUANTITY & SEVERITY	10.5	18 L	10.5	3 x 20	109 L	
	7		21	4.5 x 300		
	4		10.5			
	10		5			
	7		4			
	18		42.5 L			
	10.5					
	7					
	5					
TOTAL SEVERITY L	84	18	93.5	1300	108	
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	8.5	L	15
9	0.9	L	2
19	61.9	L	13.5
7	5.1	L	7
q=	TOTAL DEDUCT VALUE		37.5
	CORRECTED DEDUCT VALUE (CDV)		22

PCI = 100 - CDV = 78

RATING = very GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

493

BRANCH Rt 234 SECTION RS 15617-A

DATE _____ SAMPLE UNIT 16

SURVEYED BY _____ AREA OF SAMPLE 200 X 10.5 = 2100 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	0	1	9	10	7	19
QUANTITY & SEVERITY	4'	9 x 1.5 L	10 L	10.5	200 L	200 x 9.5
	10.5	10 x 1.5 L		10.5		
	10.5	17 x 2 L		10.5		
	14.5	11 x 3 L		11		
	10.5	9 x 3 L		10.5		
	10.5			21		
	10.5			21		
	10.5					
	10.5					
TOTAL SEVERITY L	107.5	116.5	10	99.5	200	1700
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	99	L	16.5
1	5.6	L	26.5
9	0.5	L	2
7	9.5	L	11
19	81.0	L	15
q= TOTAL DEDUCT VALUE			71
CORRECTED DEDUCT VALUE (CDV)			40

PCI = 100 - CDV = 60

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 234 SECTION RS 15617-A 494

DATE _____ SAMPLE UNIT 20

SURVEYED BY _____ AREA OF SAMPLE 200 x 10 S = 2100 S =

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	1	10	7	9	
QUANTITY & SEVERITY		10.5	illegible	10.5	illegible M	11 H	
		12.5		illegible	10 H	15 L	
		illegible		illegible	23 L	illegible L	
		illegible		illegible	20 H	112 M	
		11 5			9 L	9 L	
		15.5			illegible 9 H		
		10.5			44 H		
		illegible					
		5					
TOTAL SEVERITY	L	91.5	6.75	151	32	41	
	M				37	112	
	H				103	11	

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	11.6	L	18
1	0.3	L	5
7	1.5	L	3.5
7	1.8	M	11
7	4.9	H	30.5
9	2.0	L	3.5
9	5.3	M	11
q=	TOTAL DEDUCT VALUE		88.5
	CORRECTED DEDUCT VALUE (CDV)		46

PCI = 100 - CDV = 54

RATING = FAIR

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

9 | 0.5 | H | 6

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 234 SECTION RS 15619 - A 495

DATE _____ SAMPLE UNIT 24

SURVEYED BY RE AREA OF SAMPLE 700 x 10.5 = 2100 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	10	19	7	9	1
QUANTITY & SEVERITY	10.5	71.0	700 x 8.5	7 L	14 M	1 M
	4'	5.5'		11.5 M	7 H	
	14.5'	15.5'		9' L	4 M	
	8'	12.5			20 L	
	10.7' M	10 M			13 L	
	15.5'	115 L			15 L	
	10.5 M					
	34' L					
	10.5'					
TOTAL SEVERITY L	93.5	225.5	1700	187.5	48	4
TOTAL SEVERITY M	21	10		11.5	18	
TOTAL SEVERITY H					7	

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	15.2	L	21
10	1.5	M	11
19	81.0	L	15
7	8.9	L	10.5
7	0.6	M	6.5
9	2.3	L	4
9	0.9	M	4
q=	TOTAL DEDUCT VALUE		82 72
	CORRECTED DEDUCT VALUE (CDV)		39

PCI = 100 - CDV = 61

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

9	0.3	H	6
1	0.2	L	4

ASPHALT PAVEMENT INSPECTION SHEET

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BRANCH Rt 234 SECTION RS 15617-A 496

DATE _____ SAMPLE UNIT 28

SURVEYED BY _____ AREA OF SAMPLE 700 x 10.5 = 2100 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	1	1	10	3	7
QUANTITY & SEVERITY	171'	200 x 8.5	1 x 1.5	10.5	17.5 H	2.5 L
	9.5		1 x 2	2.5	12 L	1½ M
	17.5			15.5	30 M	7 H
	11.5				18 L	50.5 H
	10.7					5.5 L
	10.5					10 H
	18.5					31.5 M
	17					10.5 H
	2.5					40.5 L
TOTAL SEVERITY L	263.5	1700	3.5	36.5	30	70.5
M					52.5	52
H						67

15 x 2.5 L

50

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	14.3	L	20
19	81.0	L	15
1	0.7	L	4
9	1.4	L	3
9	2.5	M	6.5
7	3.4	L	5
7	2.5	M	13
q=	TOTAL DEDUCT VALUE		104.5
	CORRECTED DEDUCT VALUE (CDV)		51

PCI = 100 - CDV = 49

RATING = FAIR

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

7	3.2	H	24
15	2.4	L	14

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

497

BRANCH Rt 234 SECTION RS 15617-A

DATE _____ SAMPLE UNIT 22

SURVEYED BY RF AREA OF SAMPLE [illegible] = 2100 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	1	10	19	4	7	15	9
QUANTITY & SEVERITY	7' x 10'	10.5'	9.5' x 200'	3' x 10.5' L	24' L	10.5'	13'
	3' x 10.5'	10.5'				8'	
	1' x 10.5'	10.5'				8'	
	3.5' x 10.5'	10.5'					
	5' x 10.5'	10.5'					
	4' x 4'	10.5' L					
	3' x 10.5'	10.5'					
	2' x 10.5'	10.5'					
		11'					
TOTAL SEVERITY L	1860.25	238	1700	31.5	24	56.5	13
TOTAL SEVERITY M							
TOTAL SEVERITY H							

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
1	8.9	L	31
10	14.0	L	20
19	81.0	L	15
4	1.5	L	9.5
7	1.1	L	3
9	0.6	L	2
q=	TOTAL DEDUCT VALUE		80.5
	CORRECTED DEDUCT VALUE (CDV)		46

PCI = 100 - CDV = 54

RATING = FAIR

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 234 SECTION RS15617-A 498

DATE SAMPLE UNIT 36

SURVEYED BY RF AREA OF SAMPLE 70 x 30' = 2100 sf

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	16	10	1	10	9	7
QUANTITY & SEVERITY	10.5 L	3.5 x 400	2 x 3	10.5 L	55 L	104 L
	13.5 L		2 x 2	8 L	47 M	
	13.5 L		1 x 2			
	176 L		4 x 7 L			
	10.5 L		1 x 3 L			
	8 L		2 x 6 L			
	10.5 L		4 x 4 L			
	10.5 L		5 x 2.5 L			
	10.5 L		3 x 4 L			
TOTAL SEVERITY L	253.5	1700	77	18.5	85	104.5
M					47	
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	13.0	L	19
19	81.0	L	15
1	3.7	L	22
9	4.1	L	6
9	2.2	M	16
7	5.0	L	7
q=	TOTAL DEDUCT VALUE		75
	CORRECTED DEDUCT VALUE (CDV)		35

PCI = 100 - CDV = 65

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 234 SECTION RS 15617-A 499

DATE _____ SAMPLE UNIT ___

SURVEYED BY RF AREA OF SAMPLE 20 x 10 = 2100 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →		19	1	9	7	10
QUANTITY & SEVERITY	[illegible] L	5.5x200	7.5 x [illegible] L	[illegible] L	47 L	23.5 L
	[illegible] L		2 x 3.5 L	25 M		10.5
	[illegible] L		2 x 1.5 L	[illegible] M		11.5 L
	10.5 M		7 x 1.5 L			
	11 L		1 [illegible] L			
	17 L					
	4.5 L					
	10.5 L					
	10.5 L					
TOTAL SEVERITY L	.268	1700	40.75	45	47	45.5
M	10.5			60		
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	149	L	20.5
10	0.5	M	4.5
19	8.10	L	15
1	19	L	15.5
9	2.1	L	4
9	2.9	M	7
7	2.2	L	4
q=	TOTAL DEDUCT VALUE		70.5
	CORRECTED DEDUCT VALUE (CDV)		39.5

PCI = 100 - CDV = 60.5

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R- 234 SECTION RS 15 617 A500

DATE _____ SAMPLE UNIT 4x1

SURVEYED BY RF, GO AREA OF SAMPLE _____ = 2100 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	19	3	1	9	9
QUANTITY & SEVERITY	1	[illegible]	75' x 15' L	[illegible]	15 L	[illegible]
	10.5'				[illegible]	
	[illegible]			1 [illegible]	130 M	
	[illegible]			1 x 2'		
	[illegible]			[illegible]		
	[illegible]			[illegible]		
	[illegible]			[illegible]		
	10 [illegible]			[illegible]		
	[illegible]			[illegible]		
TOTAL SEVERITY L	129	1700	740	91.5	15	33
TOTAL SEVERITY M					130	
TOTAL SEVERITY H					40	

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	6.1	L	12.5
19	81.0	L	15
3	35.2	L	17
1	4.4	L	24
9	2.7	L	2
9	6.2	M	12.5
9	1.9	H	9.5
q=	TOTAL DEDUCT VALUE		96
	CORRECTED DEDUCT VALUE (CDV)		46

PCI = 100 - CDV = 54

RATING = FAIR

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

7	1.6	L	3.5

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

501

BRANCH Rt 243 SECTION RS 15617-B

DATE 7/1/93 SAMPLE UNIT

SURVEYED BY RF AREA OF SAMPLE 9.5 x 200 = 1900 SF

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	9	7			
QUANTITY & SEVERITY	1	120 L	52 L			
	9					
	6.5					
	5.5					
	L					
TOTAL SEVERITY L	30	120	52			
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	45	L	3
9	63	L	8.5
7	27	L	4.5
q=	TOTAL DEDUCT VALUE		16
	CORRECTED DEDUCT VALUE (CDV)		16

PCI = 100 - CDV = 84

RATING = very. Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623. the proponent agency is USACE

BRANCH Rd 243 SECTION RS 15617-B 502

DATE 7/1/93 SAMPLE UNIT 6

SURVEYED BY RF AREA OF SAMPLE 9.5 x 200 = 1900

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	10	9	7		
QUANTITY & SEVERITY	9 L	10	146 L	47 L		
	L	9.5		44 L		
	9.5	9 L				
	L	9 L				
	24	9				
	5	8				
	13	7.5				
	5	7				
	17					
TOTAL SEVERITY L	163		146	91		
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	8.6	L	15
9	7.7	L	9.5
7	4.8	L	7
q= TOTAL DEDUCT VALUE			22.5
CORRECTED DEDUCT VALUE (CDV)			11.5

PCI = 100 - CDV = 88.5

RATING = Excellent

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R+243 SECTION RS (5617 · B 503

DATE 2/1/93 SAMPLE UNIT 12

SURVEYED BY RF AREA OF SAMPLE 200' X 9.5 = 1900

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	10	7	9	9		
QUANTITY & SEVERITY	9	5	10 L	90 M	2		
	5 L	7		60 H	11.5		
	8	6			9.5		
	2	7.5			6		
	9.5	9.5			9.5		
	9.5	4.5			19.5		
	6	5			9.5		
	12	9.5			10		
	9.5	3					
TOTAL SEVERITY L	212.5		10				
M				90			
H				60			

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	11.2	L	17.5
7	0.5	L	2.5
9	4.7	M	10.5
9	3.2	H	13
q=	TOTAL DEDUCT VALUE		43.5
	CORRECTED DEDUCT VALUE (CDV)		26.5

PCI = 100 − CDV = 73.5

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623; the proponent agency is USACE

BRANCH Rt 243 SECTION RS 15617-13 504

DATE 7/1/93 SAMPLE UNIT 18

SURVEYED BY RF AREA OF SAMPLE 200×9.5 = 1900

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	7	10	10		
QUANTITY & SEVERITY	9.5	33×1 H	5	5.5		
	9.5	20×1 L	9.5	0.5		
	9.5	11×1 H	9.5	9.5		
	9.5	1×74 L	9.5	3.5		
	9.5		5	3		
	10		9.5	9		
	5		9.5	9		
	9.5		0	9.5		
	5		5.5			
TOTAL SEVERITY L	729.5	94				
TOTAL SEVERITY M						
TOTAL SEVERITY H		44				

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	12.1	L	18.5
7	49	L	7
7	2.3	H	20
q=	TOTAL DEDUCT VALUE		45.5
	CORRECTED DEDUCT VALUE (CDV)		28

PCI = 100 - CDV = 72

RATING = very GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH SR 231 SECTION RS 15617-B 505

DATE 7/1/93 SAMPLE UNIT 24

SURVEYED BY RF AREA OF SAMPLE 200x9.5' = 1900

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	3	10	7	10	9	1
QUANTITY & SEVERITY	9 x 1.5	3.5	167 H	5	200 M	38.5 x 1.5' L
		9	23 M	15		
		70		3		
		9.5		13		
		21				
		8				
		9.5				
		8				
		7.5				
TOTAL SEVERITY L	13.5	141				57.75
M			23		200	
H			167			

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
3	0.7	L	0
10	7.4	L	14
7	1.2	M	9
7	8.8	H	38.5
9	10.5	M	20
1	3.0	L	20
q=	TOTAL DEDUCT VALUE		101.5
	CORRECTED DEDUCT VALUE (CDV)		53

PCI = 100 - CDV = 47

RATING = FAIR

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the management agency is USACE

BRANCH Rt 243 SECTION RS 15611-B 506

DATE 7/1/93 SAMPLE UNIT 30

SURVEYED BY RF AREA OF SAMPLE 200 x 9.5 = 1900

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	7	10	3	9	10	
QUANTITY & SEVERITY		1.5 x 136 L	65	37 x 7 L	90 M	8	
		1.5 x 30 H	9.5	5 x 3 L	60 L	9.5	
		2.0 x 34 M	9	6.6 L		5.5	
			8.5			9.5	
			8			6	
			8			11	
			8				
			8				
			8				
TOTAL SEVERITY	L	136	130	310	160		
	M	34			90		
	H	30					

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	7.2	L	9
7	1.8	M	11
7	1.6	H	17
10	6.8	L	13
3	16.3	L	11
9	3.2	L	5
9	4.7	M	10
q=	TOTAL DEDUCT VALUE		76
	CORRECTED DEDUCT VALUE (CDV)		36

PCI = 100 - CDV = 64

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 243 SECTION RS-15617-B 507

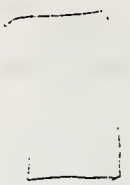
DATE 7/1/93 SAMPLE UNIT 36

SURVEYED BY RF AREA OF SAMPLE 9.5 x 200' = 1900

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	7	9	1	10	10
QUANTITY & SEVERITY	9.5	200 x 1.5 L	200 M	1x3 L	3	4
	10	6.6 x 1 L		1x3 L	9.5	9.5
	17				4	9.5
	8				9	9.5
	9				9.5	9.5
	4				4	9.5
	9.5				9.5	4
	16				9.5	
	10				9.5	
TOTAL SEVERITY L	205	126		6		
M			200			
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	10.8	L	17
7	6.6	L	8.5
9	10.5	M	20
1	0.3	L	4.5
q=	TOTAL DEDUCT VALUE		56
	CORRECTED DEDUCT VALUE (CDV)		31

PCI = 100 - CDV = 69

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 243 SECTION RS 15617-B508

DATE 7/1/93 SAMPLE UNIT 42

SURVEYED BY RF AREA OF SAMPLE 200x9.5 = 1900

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	10	7	9	10	10	
QUANTITY & SEVERITY		7	1.5x25.5 L	125 H	5	9.5	
		9	9x1 M		4	6	
		9.5	23x1 L		4	32	
		5	1x16 H		3.5		
		3	76.5x1 L		4.5		
		16	57.5x1 L		4		
		7			3.5		
		7.5			7		
		7.5			2		
TOTAL SEVERITY	L	156.5	178.5				
	M		9				
	H		16	125			

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	8.2	L	15
7	6.8	L	9
7	0.5	M	6
7	0.8	H	12
9	6.6	H	23
q=	TOTAL DEDUCT VALUE		65
	CORRECTED DEDUCT VALUE (CDV)		36

PCI = 100 - CDV = 64

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 243 SECTION KS 15617 - B509

DATE 7/1/93 SAMPLE UNIT 48

SURVEYED BY RF AREA OF SAMPLE 200 x 9.5 = 1900

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	7	1	10	9	15	16
QUANTITY & SEVERITY	2 x 30 L	1 x 30	7.5	30 M	3	11
	1 x 30 H		7.5	27 L	2	
	1 x 53 L		5	120 M	7	
	1 x 38 M		2		7.5	
	1 x 24 L		3		9	
			3		7	
			5		18	
			3		5	
			3.5		6.5	
TOTAL SEVERITY L	107	30	114.5	27		
M	38			150		
H	30					

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	5.6	L	7.5
7	20	M	11.5
7	1.6	H	17
1	1.6	L	14
10	60	L	12
9	14	L	3
9	78	M	15
q= TOTAL DEDUCT VALUE			80
CORRECTED DEDUCT VALUE (CDV)			38

PCI = 100 - CDV = 62

RATING = GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 243 SECTION RS 15617-B 510

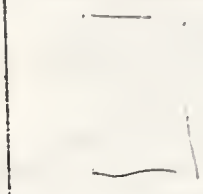
DATE 7/1/93 SAMPLE UNIT 54

SURVEYED BY C.F AREA OF SAMPLE 95 x 200 = 1900

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	7	6	11	1	9
QUANTITY & SEVERITY	9	2 x 16	2 x 31 L	7.5	3 x 80	200 L
	16			7.5		
	9.5			7.5		
	7.5			3		
	9.5			4		
	8.5 M			3.5		
	2			3.5		
	2.5			5		
	9.5			5		
TOTAL SEVERITY L	128	16	37		240	200
TOTAL SEVERITY M	8.5					
TOTAL SEVERITY H						

10
3.5
5
5.5

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	6.8	L	13
10	0.5	M	4.5
7	0.8	L	3
6	2.0	L	5
1	12.6	L	35
9	10.5	L	12
q=	TOTAL DEDUCT VALUE		72.5
	CORRECTED DEDUCT VALUE (CDV)		46

PCI = 100 - CDV = 54

RATING = FAIR

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH R+243 SECTION RS-15617-B 511

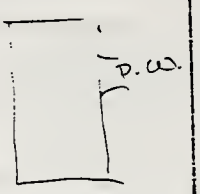
DATE 7/1/93 SAMPLE UNIT 60

SURVEYED BY RF AREA OF SAMPLE 9.5 X 200 = 1900

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Carrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:



EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	10	10	7	9	10	
QUANTITY & SEVERITY	9.5	200	5 L	150 L	9.5	
	4	8	19 L		9.5	
	2	9.5			9.5	
	5	9.5			9.5	
	10	5			9.5	
	9.5	1			8	
	0.5	9.5				
	9.5	0				
	4	9.5				
TOTAL SEVERITY L	388		24	150		
TOTAL SEVERITY M						
TOTAL SEVERITY H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
10	20.4	L	24
7	1.3	L	3
9	7.9	L	10
q= TOTAL DEDUCT VALUE			37
CORRECTED DEDUCT VALUE (CDV)			27

PCI = 100 - CDV = 73

RATING = very GOOD

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623; the proponent agency is USACE

BRANCH Rt 243 SECTION RS 15617-B 512

DATE 7/1/93 SAMPLE UNIT lole

SURVEYED BY CF AREA OF SAMPLE 25 x 222' = 1900

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

	TYPE →	7	10	6	10	9	
QUANTITY & SEVERITY		2 H	3	17 x 2.5 H	5	200 M	
		155 M	5.5		5.5		
		710 L	4		7		
			5				
			9				
			9				
			9				
			5				
			27				
TOTAL SEVERITY	L	26	94	42.5			
	M	155				200	
	H	2					

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	1.4	L	3
7	8.2	M	22.5
7	0.1	H	7.5
10	50	L	11
6	2.2	L	5
9	10.5	M	20
q=	TOTAL DEDUCT VALUE		69
	CORRECTED DEDUCT VALUE (CDV)		39

PCI = 100 - CDV = 61

RATING = Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

ASPHALT PAVEMENT INSPECTION SHEET

For use of this form, see TM 5-623, the proponent agency is USACE

BRANCH Rt 243 SECTION RS15617 - B

DATE 7/1/93 SAMPLE UNIT 72

SURVEYED BY RF AREA OF SAMPLE 200' x 9.5

Distress Types

1. Alligator Cracking
2. Bleeding
3. Block Cracking
*4. Bumps and Sags
5. Corrugation
6. Depression
*7. Edge Cracking
*8. Jt Reflection Cracking
*9. Lane/Shldr Drop Off
*10. Long & Trans Cracking
11. Patching & Util Cut Patching
12. Polished Aggregate
*13. Potholes
14. Railroad Crossing
15. Rutting
16. Shoving
17. Slippage Cracking
18. Swell
19. Weathering and Raveling

SKETCH:

EXISTING DISTRESS TYPE, QUANTITY & SEVERITY

TYPE →	7	10	12	6	10	9
QUANTITY & SEVERITY	62 L	9.5	9.5	41' x 3.5	5	200 L
	13 L	9.5	9.5		2	
	5 L	9.5	2		9.5	
		13	5.5		5	
		2	1			
		9.5	9.5			
		3	5			
		3	9.5			
		9.5	2			
TOTAL SEVERITY L	80	143.5		143.5		200
M						
H						

PCI CALCULATION

DISTRESS TYPE	DENSITY	SEVERITY	DEDUCT VALUE
7	4.2	L	6
10	7.6	L	14
6	7.6	L	13
9	10.5	L	12
q=	TOTAL DEDUCT VALUE		45
	CORRECTED DEDUCT VALUE (CDV)		23

PCI = 100 - CDV = 77

RATING = very Good

* All Distresses Are Measured In Square Feet Except Distresses 4,7,8,9 and 10 Which Are Measured In Linear Ft; Distress 13 Is Measured In Number of Potholes.

DA FORM 5146-R, NOV 82

Figure E-2.

Project Distresses	R14643-A S.B.	R14643-B	RS15165-A W.B.	RS15165-A1 E.B.	RS15165-B W.B.	RS15165-B1 E.B.	RS15173	RS15174-A
Alligator Cracking	low	low	low	low	low	low		low med
Block Cracking			low	low	low	low		low
Bumps & Sags	low						med	
Depression								
Edge Cracking		low med			low		low med	low
Jt. Reflect Cracking								
Lane/ Shoulder Dropoff			low med	low med	low med high	low med high	low med high	low med high
Long & Transverse Cracking	low med	low med	low	low	low		low med	low med
Patching	low	low		low				
Polished Aggregate							yes	
Potholes	low			low				
RR X-ing								
Rutting	low				low		low	
Slippage								
Weathering & Raveling			low med	low med	low med	low		low med high
PCI Rating	79.5 V.G.	77.4 V.G.	70.5 V.G.	58.9 Good	54.6 Fair	55.6 Good	48.4 Fair	52.4 Fair

Table G-1 PCI Rating and Summary of the Condition Survey Results

Project Distresses	R15174-B	R15308-A	R15308-C	R15308-D	R15309-E	R15404 6th St.	R15404 City W.B.	R15404 City E.B.
Alligator Cracking	low med	low med high	low	low	low	low med	low med	low med
Block Cracking	low med	med	low	low		low med	low	
Bumps & Sags							low	
Depression								
Edge Cracking	low	low med	low	low med		low med high	low	low med
Jt. Reflect Cracking								
Lane/ Shoulder Dropoff	low med					low med high	low med	low high
Long & Transverse Cracking	low med	low med	low med	low	low med	low med	low med	low med
Patching		low			low			
Polished Aggregate								
Potholes								
RR X-ing								
Rutting	low	low				med		
Slippage		med						
Weathering & Raveling	low	low	low med	low med high	low		low	med
PCI Rating	54.1 Fair	63.4 Good	67.3 Good	55.7 Good	75.8 V.G.	49.3 Fair	62.4 Good	68.6 Good

Table G-1 PCI Rating and Summary of the Condition Survey Results (Continued)

Project Distresses	R15502-I	RS15617-A	RS15617-B	R15630	R14643-A N.B.
Alligator Cracking	low	low	low		low
Block Cracking	low	low	low		
Bumps & Sags	low	low			
Depression			low		
Edge Cracking	low	low med high	low med high	low	low
Jt. Reflect Cracking					
Lane/ Shoulder Dropoff		low med high	low med high		
Long & Transverse Cracking	low	low med	low med	low	low med
Patching	low				low
Polished Aggregate					
Potholes					
RR X-ing					
Rutting	low	low			Low
Slippage	low				
Weathering & Raveling	low	low med		low	
PCI Rating	71.3 V.G.	59.4 Good	68.4 Good	84.4 V.G.	75.4 V.G.

Table G-1 PCI Rating and Summary of the Condition Survey Results (Continued)

VITA

Khaled Ahmed Ragab Abdel Kader Galal, "Khaled A. Galal", was born in Cairo-Egypt on 24 January 1963. He attended his elementary, middle and part of his high school in Cairo, Egypt. He received his high school Diploma (The General Certificate of Secondary "High" School) from Al-Doha High school Doha-Qatar in 1979/1980. He joint Ain-Shames University then transferred to Zagaig University – Benha Branch, Shoubra – Faculty of Engineering where he received his undergraduate degree in 1987 from the Civil and Surveying Engineering Department. In 1987, Khaled A. Galal was appointed an instructor in Shoubra – Faculty of Engineering because of his undergraduate achievement. In 1989, Khaled A. Galal joined California State University, Fresno, where he graduated with a Master Degree in Civil Engineering in December of 1991. In Fall of 1992, he joined Purdue University to pursue a Ph.D. Degree in Civil Engineering. Khaled A. Galal was offered a position with the Indiana Department of Transportation –Research Division, in February of 1997. He has been working as the Materials and Accelerated Pavement Testing Research Engineers since February of 1997. Khaled A. Galal has a number of publications in the areas of Materials, Pavement, and accelerated Pavement Testing.